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Transport Administration in Tropical Dependencies

By George V. O. Bulkeley, C.B.E., M.I.Mech.E.

With Chapters on Finance, Accounting, and Statistical Method

IN COLLABORATION WITH

Ernest J. Smith, F.C.I.S.

(formerly Chief Accountant, Nigerian Government Railway)

190 *pages* *Medium 8vo.* *Full cloth*

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THE RAILWAY GAZETTE

33, TOTHILL STREET, WESTMINSTER, S.W.1

Debate on the Steel Bill

THE debate on the Iron & Steel Bill which opened in the House of Commons on Monday promises to be the most heated of all the debates on State control measures introduced so far. Mr. G. R. Strauss, Minister of Supply, moving the second reading, while applauding the achievements of the industry in regard to output, maintained that the reasons for its success were, largely, the response of the worker to the appeal for increased production and his faith in the Government proposals for steel nationalisation. Regarding the latter claim we cannot help recalling the occasion at the Trades Union Congress last September when a resolution demanding the immediate nationalisation of steel was received with an almost complete lack of enthusiasm. Mr. Oliver Lyttelton made the point on Monday that there had been no serious labour dispute in the steel industry for 50 years and that the output of the industry had increased steadily year by year until it reached the record rate of 15,455,000 tons in October. That plans are also under way to increase the capacity of the industry to 18 million tons is well known. The terms of the present Bill, as we pointed out in our issue of November 5, perpetuate the policy of confiscating the property of shareholders, and were described by Sir John Anderson in the resumed debate on Tuesday as a "resort to gangster methods."

* * * *

F.B.I. on the Iron & Steel Bill

The Federation of British Industries has declared recently that the outstanding impression left by the above Bill is that it provides no practical plan or programme of action. The scheme to take over the share capital of the 107 major steel producing companies has the appearance of a facade to conceal the absence of constructive thought. The Bill is likely gravely to impede economic recovery by creating doubt and dislocation, and there is no evidence that the drastic changes of ownership proposed under this measure would benefit producers, consumers, workers, or the nation. The Government, in this Bill, seeks powers far in excess of those obtained in any previous nationalisation measure, yet the intentions are less precisely defined. By the acquisition of the major iron and steel companies and their subsidiaries, nationalisation would for the first time enter the field of competitive manufacturing industry on a wide scale. No duty is placed on the projected Iron & Steel Corporation to produce efficiently at the lowest cost; the interpretation of its obligations in the public interest is left to the Corporation itself. No direction is given to the Corporation to be impartial in the distribution of its products or to avoid preference in its price schedules. The provisions for safeguarding the interests of the consumer are more vaguely worded than in any previous nationalisation Act, and the whole of this important matter is left to be settled by the Minister through the making of regulations.

* * * *

Early Railway Amalgamation Schemes

A notice reprinted in our *Scrap Heap* this week shows that in 1848 the Great Western Railway contemplated amalgamation with the London & North Western and London & South Western. Nothing came of the scheme. In those early days of railways Parliament preferred working arrangements between companies to complete union. There was much opposition to the proposal to form the North Eastern Railway Company by amalgamating the York & North Midland, Leeds Northern, and York, Newcastle & Berwick companies, though the three operated in separate sections of the North Eastern region and were complementary, not competitive. In 1854, the North Eastern Railway came into being because Parliament was then convinced that the development of the region depended on a uniform system of management and unity of interest in the lines serving it. No such justification could have been put forward in support of either the 1848 G.W.R. scheme or the 1909 proposal to amalgamate the "three Greats," but somewhat similar reasons had a bearing on the constitution of the L.N.E.R. company in 1923. How odd, therefore, that unification—now the order of the day under the British Transport Commission—should establish what is practically the old North Eastern system as a separate entity once more!

Better Rail-Joint Maintenance

In view of the increasing use in Great Britain of flat-bottom rails in main-line relaying, on the Eastern, North-Eastern, and London Midland Regions in particular, the findings of a committee appointed to report to the recent annual convention of the U.S.A. Roadmasters' & Maintenance of Way Association on "Rail-Joint Maintenance" are of interest. The most notable conclusion is that fishplates 36 in. long have given substantially longer and better service than 24-in. fishplates, and in addition have lengthened the life of the rails materially by reducing rail-end batter. It has also been proved that the wear of fishplates and of the fishing edges of the rails, as well as the amount of fishbolt tightening necessary, have been reduced by the use of spring washers between fishbolts and plates of a higher tensile strength and greater resilience than previously. Other findings were no more than in accordance with the best present practice generally, such as the importance of keeping uniform expansion spaces between rails at the joints and of proper packing of joint sleepers, a regular programme of re-tightening fishbolts to compensate for wear and stretch, the desirability of end-hardening the rails and also of building up the rail-ends by welding and grinding before batter becomes serious, and of lubricating the fishplates at intervals for wear-reduction purposes.

* * * *

Stabilisation of Formation by Sand-Piling

There seems little doubt that the "sand-pile" method used by the American Southern Railway for stabilising the formation is proving eminently satisfactory. It has been used at over 100 different points, and at a cost of about 5s. to 6s. a lineal foot, has enabled 10-mile speed restrictions to be eliminated. Briefly, a short length of 12-in. timber pile is driven to a depth of about 6 ft.—the maximum depth from which it can readily be withdrawn by the pile-driving gear—is then withdrawn, and the hole immediately filled with sand. Experiments have shown that the system is most effective when the collective cross-sectional area of the piles is about 20 per cent. of the formation area. This is attained by siting piles at the ends of each sleeper, and alternate rows of three and four piles between the sleepers, the outer piles in each row being outside the rails and between the sleeper ends. Sand-piling causes the track to heave up about 3 in., and lengths of one-half to one rail length are treated at a time under a 10-mile speed restriction. To ease the 3-in. run-off, a few piles are driven ahead of the concentrated driving area. To avoid any tendency to close adjacent holes before sand-filling can be completed, driving should be staggered and those piles beyond the sleeper-ends driven first on alternate sides of the track. Considerable reduction in maintenance costs is claimed for this method of stabilisation.

* * * *

A Pneumatic-Tyre Train in France

An article in this issue describes a new train on the French National Railways which has been fitted with pneumatic tyres. This train, which recently has completed trial runs, represents an advance in the application of the pneumatic tyre to railway work, which the Michelin Company has developed with success since 1931, when the first railcar thus fitted was tried out on the Paris-Orleans Railway. From then until the war, the number of fast services operated by these petrol-engine vehicles grew rapidly, and the cars were popular with public and staff. In 1932, one was tried out in this country, and another in the U.S.A. The principle was first applied to a complete train in 1938, with the introduction of an experimental rubber-tyre electric train on the former Etat suburban lines. André Michelin is said to have conceived the idea of a pneumatic-tyre train during a sleepless night in a *wagon-lit* on his way to the Riviera. Smoothness of riding is one of the most attractive features of this train from the point of view of the passenger. Of interest to the permanent way and motive power staffs, however, is the saving in weight with such stock, achieved by the use of lightweight materials, called for by the limited load permitted on each tyre. The present six-coach train, when empty, weighs only 100 tons, well under half the weight of a six-coach train of the latest ordinary stock of the French railways, so that wear and tear of the track and full consumption of the locomotive alike are greatly reduced. Two more six-coach sets of similar design are under construction and the three trains will then operate between Paris and Strasbourg.

* * * *

Non-Smoking Compartments

At a time when smoking seems to have become a national disease, it is surely not asking too much that there should be at least a small minority of places proof against the tobacco user. Among these places we number the non-smoking compartment of which there is probably one to each coach. Even the distinctive label is not sufficient to deter the smoker from pursuing his habit there, and often the occupants are too timid or unwilling to cause any unpleasantness to remonstrate against this invasion. It would appear that the time has come when British Railways could wisely announce penalties for smoking in non-smoking compartments, whether its non-smoking occupants have agreed to this breach of good behaviour or not. There was a time when smoking was not permitted in restaurant cars, at least until the meal was finished. But so great is the downfall of manners that it is no uncommon thing to see people light up before the soup and to continue to puff cigarettes in between the courses. That such customs cause considerable discomfort to other travellers does not appear to have been discerned. We live in an age of controls, many of them unnecessary, but it would not be a bad thing for British Railways to enforce some control over behaviour in matters which affect the welfare of other passengers.

* * * *

Capability of Locomotives for Nigeria

At a press conference in London on November 15, Mr. D. C. Woodward, General Manager, Nigerian Railway, dispelled inaccurate reports which had been circulated concerning the 20 new 2-8-2 locomotives built for the railway by the Vulcan Foundry Limited, which were described in our May 7 issue. As is reported in our overseas page this week, these locomotives are giving excellent service, and have enabled groundnut haulage to the ports to be doubled in tonnage in only three months. It had been alleged that the engines were too heavy for the track. Mr. Woodward explained, however, that they were designed for, and fully occupied on, the 1,150 miles of the 1,900-mile system laid with heavy rail. This includes the whole of the main line, except for the 87 miles between Zaria and Kano in the north, and this section is being relaid with 60-lb. rails, instead of the present 45-lb. rails, which will extend still more the range of the locomotives. For the light track there are about 100 locomotives designed for this purpose, which have many more years of useful life. A further order of 52 locomotives of similar type has been placed with the North British Locomotive Co. Ltd., and the prototype was inspected at Glasgow recently by Mr. Woodward, who said he hoped that four of them would be ready for delivery by next month. It was expected that they would be received at the rate of four a month.

* * * *

Fundamental Boiler Research

Though the Shell-Type Boiler & Firing Equipment Committee, known throughout industry as the R/16 Committee, is primarily concerned with investigations on Lancashire and Economic boilers, much of its fundamental work is also applicable to locomotive practice. A report, compiled by Dr. E. G. Ritchie, the Director of Engineering Laboratories of the British Coal Utilisation Research Association, has recently been issued giving particulars of the work of the Committee up to the spring of 1948. It is entitled "The Influence of Certain Factors on the Performance of Shell-Type Boilers" and can be procured for 12s. 6d. net from the above Research Association. Locomotive men will find much of interest in this report. Moreover, the future programme of the Association includes both fundamental and experimental work on heat transfer through smoke-tubes and in other directions promises to have direct impact upon the locomotive-type boiler and suitable fuels for it. This work will be facilitated when the Association's new laboratories at Leatherhead are brought into use; there, both academic and large-scale researches are being undertaken with equipment and staff that bear comparison with those of any similar organisation in the world.

British Transport Commission Traffics

RECEIPTS of the British Transport Commission for the week ended October 31 were £450,000 less than those for the corresponding period of the previous year. It is noteworthy that this substantial decline, which is attributable entirely to a loss of £718,000 in railway receipts, should have occurred on the first occasion that a true comparison has been possible this year; the increase in railway charges came into operation on October 1, 1947.

Total railway receipts for the four weeks were £25,161,000, compared with £25,879,000. The largest decline was shown in merchandise receipts, which at £6,841,000 were down by £1,264,000. Passenger revenue at £7,935,000 was less by £218,000, and there was a small fall of £11,000 in parcels by passenger train at £2,275,000. Minerals and coal and coke traffic continued to show improvement; the former at £2,492,000 was up £173,000 and the latter at £5,618,000 rose by £74,000.

—	Four weeks to October 31		Incr. or decr.	Aggregate to October 31		Incr. or decr.
	1948	1947		1948	1947	
	£000	£000	£000	£000	£000	£000
British Railways (receipts from railway working)						
Passengers	7,935	8,153	− 218	106,817	99,865	+ 6,952
Parcels, etc., by passenger train	2,275	2,286	− 11	24,702	22,035	+ 2,667
Merchandise (other than Classes 1-6) & livestock	6,841	7,577	− 736	71,313	62,664	+ 8,649
Minerals & merchandise (Classes 1-6)	2,492	2,319	+ 173	24,345	17,966	+ 6,379
Coal & coke	5,618	5,544	+ 74	56,189	46,411	+ 9,778
	25,161	25,879	− 718	283,366	248,941	+ 34,425
London Transport—						
Railways	1,140	1,060	+ 80	12,296	11,154	+ 1,142
Buses & coaches ...	2,466	2,314	+ 152	26,879	24,306	+ 2,573
Trolleybuses & trams ...	882	854	+ 28	9,538	8,841	+ 697
	4,488	4,228	+ 260	48,713	44,301	+ 4,412
Inland Waterways—						
Tolls	64	54	+ 10	644	527	+ 117
Freight charges, etc. ...	85	87	− 2	791	763	+ 28
	149	141	+ 8	1,435	1,290	+ 145
Total	29,798	30,248	− 450	333,514	294,532	+ 38,982

Total traffics of the Commisssion for the 44 weeks of this year compared with the similar period of 1947, amounted to £333,514,000, an increase of £38,982,000. Railway receipts at £283,366,000 are higher by £34,425,000 than at this time a year ago. London Transport revenue was up £4,412,000 at £48,713,000, and Inland Waterways' tolls and charges have yielded £154,000 more at £1,435,000.

* * * *

Sir Cyril Hurcomb on Transport Integration

WHEN Sir Cyril Hurcomb, Chairman of the British Transport Commission, addressed the Railway Students' Association on October 20, he dealt at some length with "The Organisation of British Transport." We reported and commented on this paper in our October 22 issue. On Monday last, before the Institute of Transport, Sir Cyril Hurcomb carried his theme a stage further when he delivered a paper entitled "Progress Towards the Integration of Transport," some extracts of which are given elsewhere in this issue. Although he was not able to advance many specific cases in which the achievement of this aim had been secured, he did indicate the lines along which the Commission was thinking and some of the steps by which, presumably, it believes that integration can be secured. He stated quite frankly that much yet remained to be done before the unification of the railways, for example, was complete, and the measures necessary for decentralisation and devolution had been tested and adjusted.

He expressed the view that there were advantages and economies to be secured from unification in many directions. Carefully chosen teams of highly qualified experts, working with a single aim under a single direction in close co-operation with those responsible for the actual running of the machine, and backed by an adequate organisation for equipment and research, such as the Commission would introduce and extend to operational as well as technical fields, were the means by which he hoped to achieve these benefits. It was necessary to know how far the internal efficiency of each form of transport could be carried before it was possible to determine at what cost it could provide the services for which it would appear to be best suited.

Sir Cyril Hurcomb did not say so, but presumably it is reasons of this kind which are at the base of the present system of separate Executives for the various branches of transport. Although extremely slow in its realisation, the objective would seem to be to integrate as far as possible each branch of transport, secure from each the maximum economies derivable from unification and standardisation, and then to tackle the problem of co-ordination and integration of the various parts of the internal transport system. Sir Cyril Hurcomb implied as much in various passages in his address dealing with the individual forms of transport.

One of the disabilities of the present organisation of separate Executives may be that with each concentrating on its own particular problems and objectives it may be so out of touch with what is happening on other Executives that opportunities of acting in concert may be missed. It is not impossible to imagine action being taken by two or more individual Executives which, although seemingly reasonable in the restricted knowledge of each, may cancel out any expected benefits when the transport set-up is viewed as a whole. There would seem to be a need for lateral liaison between the Executives as well as vertical liaison with the Commission.

Sir Cyril Hurcomb defined integration, and said that an integrated system must be efficient, adequate, and economical, and must serve the public, agriculture, commerce, and industry throughout Great Britain. Efficiency meant that the system must be reliable, speedy, and safe; to be adequate it must provide in some form, but not necessarily in every form in every place, sufficient means of conveyance to cover peak loads, seasonal demands, and special occasions; to be economical it had to offer the maximum of service that could be provided from its share of the national resources in labour and materials at the lowest cost compatible with covering all its costs, including depreciation and the statutory amortisation of capital.

In touching on the rapid growth of "C" licence vehicles, he made it clear that the Commission was alive to the problem it represented, and argued that the question was not between road and rail but between public and private transport. All the Executives would be keen to provide trade and industry with a service at least as good as in the past. Because of the continued rise in costs, the prospect of obtaining more revenue by higher charges would remain unwelcome even if such an adjustment became inevitable. It was essential that each step towards integration should add something to net revenue, either by increasing traffic, or reducing costs and improving efficiency. He warned traders that public transport could pay its way only if it was adequately patronised wherever it could give good service. This was especially true of the railways and inland waterways.

He had some comments to make on the varying divisional boundaries of the various Executives and admitted that it might seem an ideal arrangement from the point of view of achieving integration that these boundaries should coincide. The railway boundaries were determined primarily by operating and engineering considerations, and these presented no serious difficulties in securing integration, because each form of transport had its own technique of operation; road transport had no counterpart to railway civil engineering. On the commercial side, organisation could be more elastic, and commercial officers dealing directly with customers had to have latitude in handling daily and detailed transactions. As the Road Transport Executive developed, it would be important to ensure that the commercial organisation of the three Executives on the goods side fitted in reasonably with one another, although their districts and divisions might not correspond in number, location, or area. It would be necessary to move towards a position in which transport as such would be sold in each large centre by an organisation which would act as a whole. At town and

district levels, a point of contact with the customer, a common commercial organisation must be the aim.

Pending complete control of alternative services and presentation of new schedules of charges, certain steps were being taken to integrate the existing services of the Commission. The Road Transport Executive was being given full details of the traffic on certain branch lines where existing rail services were unremunerative, so that it could consider what it would cost it to convey the traffic and the Railway Executive calculate what it would save by withdrawing its local service.

Sir Cyril Hurcomb also hinted at what may be in the mind of the Commission in the manner of drawing up a new system of charges. He pointed out that practical difficulties in allocating to each consignment, or traffic conveyed by rail, its precise proportion of overhead costs were possibly insuperable. He thought that revised classification applicable alike to traffic conveyed by rail, road, or water would have to pay less attention to the value of the commodity and much more to what had been called its "loadability." He could not commit himself to a broad general principle that would aim at road and rail rates approximately equal for medium distances, lower by rail than by road for long hauls, and higher by rail than by road for short hauls except for low-grade traffic travelling short distances to works or for shipment. It would mean adapting the principle of taper already inherent in rail rates for goods.

* * * *

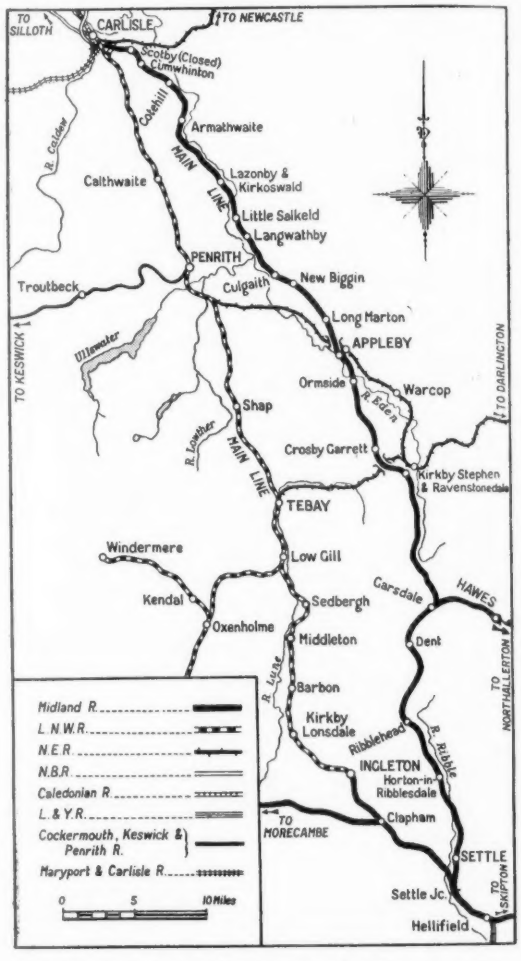
The Settle & Carlisle Line

NOW that our old railway landmarks are so rapidly vanishing, it was high time for the story of the Settle & Carlisle line of the old Midland Railway to be written by someone who knew and appreciated its countryside, and, in collaboration, Mr. F. W. Houghton and Mr. W. H. Foster have done the task well. The illustrations have the great and, in a book* of this kind, unusual merit of giving readers a picture of the scenery through which the line runs. No official "route book" has yet dealt adequately with the Midland's main line north of Leeds, and to the writer of this article the book is doubly welcome, as he knew the Settle & Carlisle line intimately at the beginning of the century and spent his early years on the adjacent "Lancaster & Carlisle"—a "tamer" line, perhaps, than the Midland's, save between Oxenholme and Shap, but with fairly similar climatic conditions to the Settle & Carlisle, and staffed at that date by very similar men, with the same agricultural interests and "spirit of community service," as the book puts it.

Sir William V. Wood's foreword pays tribute to the enterprise of the Midland's officers in overcoming many difficulties in the planning and construction of the line, and Mr. Houghton refers, of course, to the oft-quoted remarks of James Allport on the troubles awaiting anyone who tried to travel to Scotland from the Midlands *via* Ingleton and Low Gill—a double branch of the London & North Western opened in October, 1861, and running through country almost as bleak and uninhabited as the Settle & Carlisle line. But the situation had been far worse in earlier days, when the Midland's only route was *via* Lancaster, as, although the original scheme of the "Little North Western" was for a railway from Skipton to Kendal, this was subsequently reduced to a line from Skipton to Ingleton and Morecambe ("Poulton-le-Sands") with a connection at Lancaster to the "L. & C.," and this was what the Midland Railway leased in 1852 and acquired in 1871. In the mid-seventies the day service *via* Ingleton was at least tolerable on paper. The connection was then by the 8.55 a.m. from St. Pancras, 2.50 p.m. from Leeds, which joined at Tebay the 10.10 a.m. from Euston (the three-class day service to Scotland) and was due at Carlisle at 6.55 and Glasgow at 10.25 p.m., and the return was at 10.5 a.m. from Glasgow, arriving in Leeds at 5.10 and St. Pancras at 10.55 p.m., though the business was nearly all for the provinces and not for London.

It is curious to speculate on what might have happened had Derby listened more favourably in 1867 to the overtures of Euston, and been allowed to abandon the Settle & Carlisle project for the promise of better facilities over the Lancaster & Carlisle. The latter line would only have been affected in the less densely occupied area north of Low Gill, and its carrying capacity has now been so greatly increased by modern signalling and a plentiful supply of loops that, had the old proposals for a Shap deviation line matured, one may wonder whether the third main line to the Border was really the necessity we like to think it was—especially when we read the list of the engineering works on the new line, two miles longer than the Ingleton route to Carlisle, and study its gradients.

The Midland, which, as Mr. Hamilton Ellis testifies, had then "the best stations in England," built well and substantially along the "Settle & Carlisle," but the 5½ miles block-section



Midland and London & North Western routes between Settle and Carlisle

between Lazonby and Armathwaite was a grave operating drawback, even half a century ago, and the line had no loops, or sidings long enough to accommodate the big freight trains which were common after 1905. The chapter on passenger engines gives us some interesting details of performance in the early days, and takes us through the Johnson, Deeley, and Fowler epochs right up to the "Claughtons" and the rebuilt "5x" and "Royal Scot" machines. But it is worth recording that in 1938 the morning express from St. Pancras to Edinburgh was booked from Skipton to Carlisle in 90 min. at 57·8 m.p.h., and that the midday Glasgow train had to cover the 76¾ miles from Hellifield to Carlisle in 80 min. We should like, also, to have seen more reference to the palmy days of the Settle & Carlisle line before 1910, when the Midland was *really* competing for Anglo-Scottish traffic, carrying (thanks to its superior third class stock) a heavy business from the

* "The Story of the Settle-Carlisle Line." By Frederick W. Houghton and W. Hubert Foster. Foreword by Sir William Wood. Published by Norman Arch Publications, Bradford, Yorks. 113 pp., with 41 photographic illustrations, map, and gradient profile. Price 10s. 6d.

Lancashire & Yorkshire line, and presenting Hellifield with problems of "through carriage" marshalling for which that station was quite unfit. In the 1905 summer there were 20 down and 19 up passenger trains daily over the line north of Appleby, compared with the 1896 figure of 12 down and 13 up. Today the total is 9 down and 8 up, and the best time from St. Pancras to Carlisle has risen from 6 hr. to 7 hr. 10 min. Through so desolate a countryside, the local service, even in the Eden Valley below Appleby, was always sparse, and the Midland Railway made little effort to open the district to holiday-makers in the years when the North Eastern was attracting a big summer traffic to the Yorkshire moors. Early Settle & Carlisle time-tables contained nests of "conditional" and one-day-a-week stops—there were 18 such in 1902!—which gave a chance to long-distance passengers from the country stations, and in 1909 a through carriage was advertised from St. Pancras to the Settle & Carlisle district, worked north on a semi-fast train from Hellifield. Connections with the North Eastern at Appleby, for Penrith and Keswick, were poor, though in the summer of 1910 Derby, under the stimulus of an "agreement" with Euston, took one express off the Settle & Carlisle and routed it *via* Ingleton and over Shap to Penrith and Carlisle, in the hopes of drawing some traffic away from the East Coast resorts to the Lakes. All the Settle & Carlisle stations boasted in their booking halls a framed sheet of the ordnance map, with a thick red line marking the course of the railway and obliterating all details in the vicinity of the station, but much more might have been done to attract the tourist.

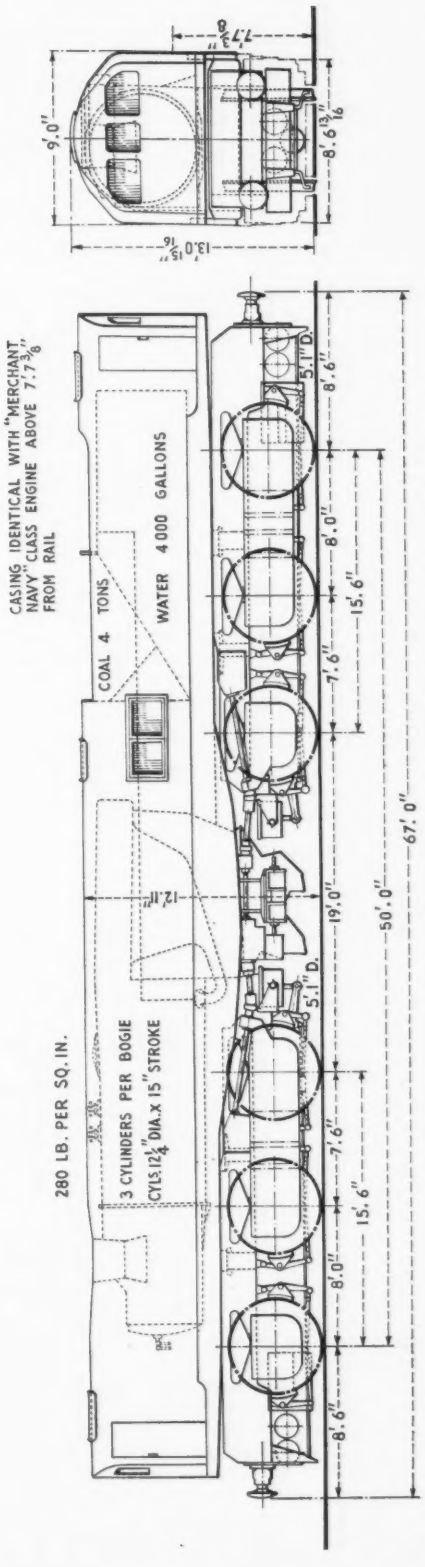
To this lack of enterprise, however, may be partly due the fact that the country adjacent to the Settle & Carlisle is one of the very few rural districts in England (as is remarked in Chapter III) still retaining its old character and charm, its old dialects and customs, and it has been singularly untouched by the two great wars. Nearly every scrap of seaside accessible to the industrial north has become a popular holiday resort, the old peace of Devon and Cornwall has almost vanished, and holiday camps, road-houses, and hostels dot the countryside. But the traveller who takes a journey to Scotland by the old Midland route, to "roar"—as Mr. Hamilton Ellis puts it in his charming word-picture of a St. Pancras to Glasgow express in 1876—"along the high places of the backbone of England," will find himself after Settle Junction in a countryside which has hardly changed in fifty years.

* * * *

The "Leader" Class Locomotives, Southern Region

IN his address to Section G (Engineering) of the British Association for the Advancement of Science, at the Brighton meeting on Friday, September 10, Mr. O. V. Bulleid, Chief Mechanical Engineer of British Railways, Southern Region, gave some advance information about the new "Leader" class of twelve-wheel tank locomotive, now in an advanced stage of construction at Brighton. A brief mention of this was made in an editorial note in our issue of September 24. The "Leader" design is certainly the most revolutionary to have advanced from the drawing-board stage to actual construction, since the Paget locomotive emerged from Derby over 40 years ago. The first locomotive of the "Leader" class was on view to those taking part in the British Association's meeting, at the Brighton Works, on the afternoon after the delivery of Mr. Bulleid's address. Its chief novelties lie in the elimination of the firebox water-legs; the provision of two three-cylinder sleeve-valve engines of special design (one for each six-wheel bogie); the move towards total enclosure of moving parts and springs and arranging for their continuous lubrication; the substitution of chains for coupling rods; and the adoption of special new devices and measures for prolonging the period of service between boiler wash-outs, to a length of time outside all normal experience in this country.

In his address Mr. Bulleid introduced the "Leader" class with the remark that there is much work for which tender engines are not necessary. To cover such duties and thereby meet practically all requirements, a tank engine is needed, able to work passenger and goods trains over all the Region, with unimportant exceptions.



Outline diagram showing the general design of the "Leader" class tank locomotive

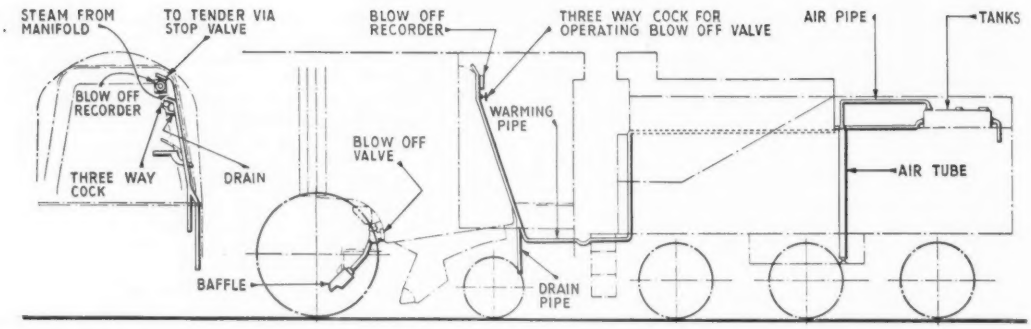


Diagram showing the arrangement of the T.I.A. feed-treatment process in a Southern Region Pacific locomotive

As the design of the "Leader" class incorporates many new features, five of these engines are being built, so that they can be tried out in all classes of traffic over the whole Region. Two six-wheel bogies carry the engine, and the whole weight is available for adhesion, both for driving and for braking. The engine is designed to run equally well in either direction. A driving cab is provided at each end, so that the driver shall have a full view of his signals and of the track.

The valve motion, connecting rods, and such parts, are all enclosed and are continuously lubricated. Roller bearings are used in all the axleboxes. The suspension springs are above the axleboxes and are carried inside the box frame. Both the axleboxes and the springs are under continuous lubrication. As any marked increase in thermal efficiency and power output is improbable with piston valves as now arranged, the further improvement desired had to be sought in other directions.

A new design of cylinder, incorporating a sleeve valve, has been introduced and has been tested on a converted Atlantic locomotive, No. 2039, *Hartland Point*. The admission of steam into the cylinder, and the exhaust from it, is controlled by a single sleeve, inside which is the piston. This sleeve is made of cast iron and slides inside liners of cast iron, which are pressed into the fabricated steel cylinders. A system of levers imparts a certain degree of axial rotation to the sleeve during the course of its travel.

The steam admission and exhaust ports are machined in the sleeve, and are equally distributed around the circumference, so as not to impede the flow of steam into the cylinder and the exhaust steam to the blast pipe.

The steam and exhaust ports are separate, whereas in the ordinary type of locomotive cylinder the same passages convey both live and exhaust steam to and from the cylinders. In the "Leader" class the steamchest volume is 3¼ times the cylinder volume at maximum cut-off. The ratio of the port area to the cylinder area, as compared with the "West Country" class, is 1·9/1. The clearance volume is only 6 per cent. These three features—greater steamchest volume, increased port area, and reduced clearance volume—should, in the designer's opinion, increase the thermal efficiency appreciably.

The boiler is of welded construction throughout, and does not contain a single rivet. The usual firebox, with water-legs, has been eliminated, and its place is taken by four thermic syphons in conjunction with a round-topped drum and a barrel containing the tubes and superheater flues.

Four thermic syphons are attached to the underside of the drum at the heads of the syphons. The necks of the syphons are attached to the underside of the boiler barrel. These syphons will ensure the circulation of water from the boiler barrel to the drum above the fire, the water passing through the thermic syphons at the hottest part of the furnace. The hot gases will be on both sides of all the syphons, and not (as in the usual water-leg of the firebox) at one side only. This should reduce the maintenance of the firebox, as a large proportion of this maintenance on the water-leg type of firebox is spent on attending to, and renewing, the water-space stays connecting the inner and outer fireboxes.

No trouble from scale is feared, as the T.I.A. water-treatment equipment is being fitted. This is the Traitement Intégral Armand, standard practice on the French National Railways, which now has been introduced on the Southern Region. The water in the tanks and in the boiler is tested chemically every day. The chemical fluid required to treat the water is displaced automatically from the tank in which it is carried, in proportion to the quantity of water put into the water tank, when water is taken. Its composition is based on the water, or waters used, and is varied to meet the conditions revealed by the daily examination.

This treatment neutralises the ill effects of the oxygen and the carbon dioxide in the water, and all the scale-forming constituents in the water are precipitated in the form of a soft non-adhering mud. The water is brought down to zero hardness, and is made alkaline, so corrosion no longer is to be feared.

A manually operated blow-down valve is fitted on the bottom of the firebox and is opened every 30 miles for 30 seconds. This has suppressed priming. Automatic blowing-down has been found ineffective, as the water in the firebox-legs was not disturbed sufficiently to get rid of the mud deposited.

This system of boiler water treatment has made it possible to increase the periods between boiler washings from 7 days to 2 months. Moreover, the boilers which showed scaling before treatment, now are completely free from any traces of it. The period of 2 months has been selected, because it is felt desirable to inspect the firebox plates and stays at this interval.

* * * *

The Winsford Collision

THE collision at Winsford on April 17, 1948, attracted a great deal of notice, not only by reason of the regrettably heavy casualty list, which included 24 fatalities, but also from the fact of the first train having been stopped in section, in consequence of a soldier, who wished to reach his home nearby with the minimum of trouble, operating the train communication apparatus and disappearing in the dark as soon as the train came to a stand. This added to the difficulties of the train crew, who were unable to find the origin of the alarm, and so led to some time being lost in carrying out the rules applying to the circumstances. It is at just such a time, of course, that the protection intended to be provided by the block telegraph is needed most imperatively, but unfortunately, a complete breakdown in the working occurred. The signalman at the box in advance, Winsford Station, although he had not seen the train, and did not at any time profess to have done so, returned "train out of section" and accepted the second one under the impression that the first must have passed, and this he did in spite of the fact that the box in advance, as well as that in rear of him, had made inquiries as to its whereabouts.

The explanations which were offered by him for his failure must be judged from the account of them given in our summary of Lt.-Colonel G. R. S. Wilson's report, which appears in this issue. The block controls were of a very complete type, generalised throughout long lengths of main route

by the former L.M.S.R., but did not afford any positive protection against the sort of confusion under which this man was labouring.

Apart from certain discrepancies in the evidence, more or less usual in all these cases, the main facts involved in this serious accident were at no time in doubt, and, therefore, the principal interest of Colonel Wilson's report lies in the opinions he expresses on the question of improving block controls still further. All the Regions, for some time past, have been adding a certain amount of equipment to the ordinary block telegraph, designed to prevent the more likely errors to which signalmen are liable, but they do not usually cover the type of blunder made in this instance. The older forms of lock-and-block were intended to do so, and the Welwyn Control, adopted by the former L.N.E.R., was produced with the same object. The emergency release feature, unavoidable with such equipment, requires to be very carefully arranged, however, if it is not to be open to misuse at the hands of a deluded man. The Railway Executive, we learn from the report, is considering the possibility of standardising the Welwyn Control, and no doubt the provision of a co-operative release, which Colonel Wilson recommends, will be fully investigated from this point of view. As we pointed out after the South Croydon accident of October 24, 1947, when the Sykes apparatus was irregularly reset to normal by a man whose mind had become completely confused, the guiding principle to be aimed at should be to prevent all cancelling of the block once a train has entered the section, thus restricting the use of the releasing mechanism to those cases where it is safe to have recourse to it.

It was inevitable that the general question of the efficacy of the present time-honoured methods of protecting, at night, a train stopped out of course, should be brought under discussion after such a bad collision, and the report, as we were expecting it to do, refers to the possibility of using flares, experiments with which have been carried out from time to time since the Dinwoodie accident in 1928. We cannot help feeling that we ought to try and make sure whether something more certain of being seen than a red hand-lamp cannot be found for use in serious emergencies, and we are pleased to see that trials are being continued to ascertain whether recent developments in pyrotechnic equipment offer possibilities of something reliable now being obtained. Of the numerous suggestions received from the public in connection with the accident, some bearing evidence of much thought, none seemed to be sufficiently practical for Colonel Wilson to feel called on to refer to them, but he stresses the point that use of the communication chain should not be attended with danger if the rules are faithfully carried out. The present system, he considers, also has the advantage of great simplicity and of making use of the brake equipment, which is under constant test on a journey.

LETTERS TO THE EDITOR

(The Editor is not responsible for the opinions of correspondents)

East-West Connections

23, Somertrees Avenue,
London, S.E.12. November 5

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—In your issue dated October 29, Mr. Gilbert Dalton remarks how valuable a Peterborough—Gloucester through train *via* Rugby and Leamington Spa would be. He may recall, perhaps, that in the summer of 1908 such a train was tried, and the junction between the old L. & N.W. and G.W. lines south of Leamington was put in on purpose for it. Actually the train ran through from Yarmouth and Lowestoft to Cardiff, but was attached at Gloucester to the Newcastle—Barry train, then using the Great Western's Banbury—Cheltenham branch through Chipping Norton. The through train left Cardiff at 10.20 a.m. and Gloucester at 11.50, called at Malvern Road, Stratford, and Leamington, and was due at Peterborough at 3.10 p.m., not stopping at Rugby, where the up platform was occupied at this time of day by the "Sunny South Express." In the opposite direction the train left Peterborough at 1.35 p.m., called at Rugby, and was due at Gloucester at 4.40 p.m. It loaded very poorly and had a brief career, but that is not to say that improvement of the East and West connections over the Peterborough—Rugby line is not badly needed today.

Yours faithfully,
R. E. CHARLEWOOD

Station Announcers

"Deanscroft," Deans Lane,
Walton-on-the-Hill,
Tadworth, Surrey. October 12

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—It was refreshing to read, in your issue of October 1, of the beautiful voices of the Western Region station announcers.

In deference to the Southern Region, however, on which I happen to be a regular traveller, I would note that the general standard of announcing is undoubtedly high, although there are "black spots" at certain important junctions, as many of us are painfully aware. If one may single out particular stations for praise, then I would place Redhill and East Croydon at the top of the list, with Three Bridges and Purley as close rivals.

There is, of course, more in the art than merely reading out a list of stations, departure platforms and instructions concerning the whereabouts of the subway, and while it is comforting to hear one's regular train duly announced, the broadcasting of details of abnormal running in bad weather, or out-of-course working becomes a necessity if a loudspeaker system is really to justify itself. Attention to detail, such as the precise moment at which any announcement is made, is a matter of considerable importance if the loudspeakers are not to be drowned by the noise of the trains themselves. How often is an otherwise good announcement spoilt by its being made just as an arriving train releases its brakes or even as the train to which it refers is just leaving?

I find that, generally speaking, the full-time announcers (who often seem to reside in the signal box) are better than those who operate from stray microphones on platforms, notwithstanding the frequent punctuation of their remarks with the sound of the block bell or the familiar "drop" of the Sykes release!

Yours faithfully,
C. F. WELLS

Train Service Deficiencies

"Staniland," Radwell,
nr. Felmersham, Beds. October 8

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—No doubt you will recall the fact that the travelling public was led by the daily press, in early September, to believe that the advent of the British Railways winter timetables would bring much improved train services, presumably as a result of nationalisation! The publication of the winter timetables has exploded completely that hope, and apart from one or two minor improvements on the main line and Eastern Region they leave very much indeed to be desired.

You were kind enough to publish in your June 4 issue a letter of mine on the subject of the service to Bradford, and that, like many other services, shows no improvements at all except for the addition of a new express from St. Pancras at 2 p.m.

I fully agree with the remarks in Mr. H. C. Casserley's letter, published in your issue of October 1, concerning the St. Pancras to Manchester service, or *vice versa*. I frequently travel between Manchester, Leicester, Kettering, and Wellingborough, and only last week we had a "5XP" and "ten" on the 4.15 p.m. *ex* Manchester Central, and from the leisurely run from Ambergate to Derby the driver must have been wondering what to do with his time.

Still on the subject of the Manchester service—it has been remarked, I think, that there is only one place that the timetable people can keep in their minds and that is London. If one wants to travel to or from London, then all is usually well, but to take a journey to an intermediate station or cross-country, then, to quote a phrase, "one has had it." Luck might bring off a good connection, but rarely design. The 4.5 p.m. from Manchester London Road used to give a good connection to Rugby, Northampton, and the Midlands by stopping at Stafford, but now it runs *via* Stoke-on-Trent, after which place it is non-stop to London. The connection from Stoke-on-Trent to Stafford arrives at the latter place at 5.49 p.m. and the connection to the south, stopping at Nuneaton and

Rugby, which, of course, is the 4.5 p.m. from Liverpool Lime Street, has departed at 5.40 p.m.

In another letter of mine, published in your July 2 issue, I made reference to the train arrival indicator at London Euston. I was rather mystified to observe that amongst the late arrivals was "The Royal Scot," 10 min. late, which allowing for that 10 min. would make its arrival time at 6.40 p.m. It eventually came in at 6.53 p.m., which shows that the indicator is not, apart from its other faults, a purveyor of truth!

Yours faithfully,
H. W. FRANKLIN

G.N.R.(I.) Class "VS" Locomotives

The Hoffmann Manufacturing Co. Ltd.,
Chelmsford, Essex. November 10

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—We were interested to see the reference to our roller bearing axleboxes as fitted to the Class "VS" locomotives for the G.N.R. (Ireland) in your issue of November 5.

It is rather unfortunate, however, that these boxes were referred to inadvertently as "pad-lubrication type." They are better described as "pad-location type," as the end thrust or location of the axle is taken on a phosphor-bronze thrust pad. This thrust pad has a grease-saturated felt strip let into the face which wipes the axle end and so keeps the thrust faces lubricated.

If this point could be made clear to your readers we feel it would correct the impression that the use of the pad is for lubricating the roller bearings.

Yours faithfully,
E. T. HORRINGTON

Seat Reservations on "The Master Cutler"

Edward Exley (Sales) & Co. Ltd.,
Highland House,
Worksop. November 13

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—One of the advantages of this train is the seat reservation service, for which one pays 1s. extra to the fare. I order and pay for my reservations anything up to a month before the date of travel. On November 4 last, having booked, and paid for, my seat at the Sheffield Station office, as long before as October 15, I found my seat, No. 7, Back, Car A4, was occupied by a gentleman who produced a ticket exactly similar to mine for this seat, which he had purchased at Marylebone seat reservation office on October 29 last.

Whilst the usual argument was in progress the occupier of seat 7, Facing, Car A4, was shaken out of his amusement at his opposite number's discomforture by a lady from Sheffield who claimed his seat. This also had been sold twice over.

Sir Sam Fay, a week or so ago, rightly describes those who now attempt to run the railways as a bastard çivil service; the above double-booking of the same seats from two separate offices is typically civil service, and would not have happened in the good old days of the L.N.E.R.

Yours truly,
V. BOYD-CARPENTER

Connections at Crewe

From Lt.-Colonel Sir Michael Peto, Bt.,
Dundonnell House,
By Garve, Wester Ross,
Scotland. November 3

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—Have you observed the incredibly diabolical ingenuity with which the timetable experts contrive to make West to North trains miss connecting trains to Scotland at Crewe? For example, on weekdays the 12.45 p.m. express from Cardiff to Manchester is timed to arrive at Crewe at 4.15 p.m., so that it just misses the 4.14 p.m. express from Crewe to Glasgow! On Sunday evenings, the train from South Wales arrives (after being given no less than 85 min. from Shrewsbury!) at 10.35 p.m., just missing the sleeping car train to Inverness by *one* minute! Some of the corresponding "connections" from Bristol and the West of England also are so timed as to ensure a wait of from 3 to 5½ hr. at Crewe. Why? Surely because the railways are working so badly and so unreliably that the management *dares not* show in the timetables reasonably close and convenient connections by long-distance trains at a junction like Crewe, being hag-ridden by the spectre of unpunctuality, caused by bad coal, arrears of maintenance, and not least by a total lack of keen and conscientious work by most of the staff, who are now without pride in the job or loyalty to their line. It is hypocrisy to speak of railway "service" when the only form of service given by a section of the staff since the end of the war has been to rob, and skimp the work. Pilfering alone cost the railways £2,600,000 last year. Surely it is time that the thousands of honest and loyal and hard-working railwaymen showed up these scallawags, and that the irades unions disowned and expelled them.

Yours faithfully,
MICHAEL PETO

Repairs to Scottish Washouts

Sand Lodge,
Shetland. November 10

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—It would appear from a recent public speech by the Chairman of the Railway Executive that along with the physical assets of the four main-line companies the Government has acquired the services of the Management for Socialist propaganda. Sir Eustace Missenden is reported in *The Manchester Guardian* of October 27 as saying that the former L.N.E.R. main line in south-east Scotland would never have been repaired so quickly after the August floods if the railways had not been nationalised. Surely, in such an emergency, had the old Railway Executive Committee still been functioning, the L.N.E.R. would have received just the same help from the other main-line companies and the Corps of Royal Engineers. Be that as it may, is it not a serious departure from British traditions for permanent Government officials to speak publicly in favour of controversial party policies? Surely that should be left to the Minister of Transport and the Parliamentary Secretary.

Yours faithfully,
R. H. W. BRUCE

[Contrary to a prevalent conception, the members of the British Transport Commission and its five Executives have not *ipso facto* become members of the Administrative Grade of the Civil Service. The Permanent Secretary of the Ministry of Transport is a member.—ED., *R.G.*]

Railway Engineers' Salaries

November 8

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—It is remarkable that there has not been any comment by correspondents, or elsewhere, in your journal on your editorial note of October 15 regarding railway engineers' salaries. The truth of the poor salaries paid to technical assistants in engineering departments on home railways is beyond dispute. It is not limited to the mechanical sections mentioned by you. It applies also to civil, electrical, signal, and telegraph departments.

Any member of these departments who has spent half or more of his life in them can recall many past colleagues who, tired of waiting and hoping, have left the service and succeeded in other fields far beyond anything they were likely to achieve had they remained. This means that the railways frequently lose their most promising men, and it is indeed, as you say, "an unhealthy state of affairs for British Railways." And yet your note appears to have been accepted without any word of approval or dissension. In my view this is unfortunate, as the subject and your remarks deserve serious attention and publicity.

It is, however, interesting to note that Sir Eustace Missenden has told the Institute of Transport of the need to "attract *and keep* the very best types of young men and women." Does this mean that, at last, a railway career for engineers will be comparable with engineering work in other industries? But perhaps Sir Eustace was not thinking of engineers—those oft-forgotten Sons of Martha.

For obvious reasons I have used a nom-de-plume, and must ask you not to publish my name and address.

Yours faithfully,
SLOW LINE

L.M.R. FILMS AND FILMSTRIPS.—A series of 16-mm. monochrome and colour films with sound-track, dealing with railway work and travel, as well as general interest subjects, now can be borrowed, free of charge, by schools and clubs, from the London Midland Region of British Railways. For the purpose, the fourteen L.M.R. District Commercial Managers have been equipped with a complete film library of these films and a number of filmstrips providing up to 100 still pictures on such subjects as "Travelling Post Offices," "The Permanent Way," and "Passenger Trains."

The Scrap Heap

Awards have been made to 306 stations in the Scottish Region best-kept stations competition for 1948. In the special-class prize list of £6 each, are Barnhill, Canonbie, Coulter, Crieff, Fauldhouse, Garnkirk, Kildonan, Kilmany, Nethybridge, and Newmilns stations.

* * *

Evening Classes for Stationmasters and Porters

To improve their knowledge of train signalling, 3,116 stationmasters, porters, and other grades of staff at 33 centres on the London Midland Region are attending evening classes in their spare time this winter. At most classes there are working models so that the students receive realistic experience. The enrolment is 20 per cent. higher than last season.

* * *

100 YEARS AGO

From THE RAILWAY TIMES, *Nov.* 18, 1848

GREAT WESTERN RAILWAY COMPANY.—NOTICE is HEREBY GIVEN, that a SPECIAL GENERAL MEETING of the Proprietors of Shares in the Great Western Railway Company, will be held at the Paddington Station, on the 13th day of December, 1848, at One o'clock precisely, for the purpose of taking into consideration the propriety of making an application to Parliament for powers to amalgamate that Company with the London and North-Western and the London and South-Western Railway Companies, jointly or separately; and also to consider the preliminary and other arrangements proposed in connection therewith, and for other special purposes.

And if it shall be determined to make the said application to Parliament, there will be submitted to the proprietors of shares present at such meeting, for their approval, the draft of a Bill to be introduced in the next session, with the title and for the purposes following (that is to say):—"A Bill to authorise the Amalgamation of the London and North-Western, the Great Western, and the London and South-Western Railway Companies with powers for the Amalgamation of the Great Western Railway Company with either of the other Companies, and for other purposes."

The chair will be taken at One o'clock precisely.

C. RUSSELL, Chairman.
CHAS. A. SAUNDERS, Secretary.

Paddington Station, Nov. 2, 1848.

* * *

Railway Fares

The falling returns of the railways are clear evidence that the excessive fares are now a deterrent to travel. It has in fact been demonstrated already that extra revenue cannot be obtained by raising the rates beyond the capacity of the public to pay. But means are available to increase passenger traffic which are in vogue in other countries and which confer benefit on the public as well as attracting funds to swell the railway budget. The mean concession recently granted of cheap daily tickets is vitiated by tiresome restrictions as to the time of starting and return. Why not make them available by any train and on any day? This concession is unlikely to overcrowd the trains during the busy hours if the tickets can be obtained all the week round.

In the United States, 1,000-mile vouchers are sold at a discount. They are preferable to season tickets for occasional travellers and, being transferable, they are available for the wife and family. They confer a great benefit upon country dwellers who occasionally have to visit adjoining cities but are now deterred by the excessive fares. Joint season tickets might be issued for man and wife. A zone system was formerly in use in Hungary, vastly increasing the traffic. In another European country long journeys are charged at greatly decreased rate. This should increase traffic to Scotland and Ireland, thereby helping materially closer communication. There must be many other ideas which might be explored. Now that the railways are nationalised it is time to introduce reforms which will benefit the public and at the same time contribute to the revenue of the railways. The object is to help to sustain or increase receipts by offering suitable attractions to the travelling public.—*Mr. A. Wigglesworth in a letter to "The Times."*

* * *

London Midland Entries Triumph at Horse Shows

During this season's public horse shows at centres up and down the country, parcel vanmen and carters of the London Midland Region of British Railways have captured 290 prizes with 400 entries. At the Regent's Park (London) Parade, 61 L.M.R. horses gained 60 first prizes and one second, and at King's Heath (Birmingham), 16 L.M.R. entries, competing against all comers, took all the carthorse awards. The keenness for competitions of the L.M.R. carters is further shown by the results of the 103 railway parades this year, when there were more than 1,000 entries from a total L.M.R. stud of 4,682.

* * *

Brief Encounter

As a colleague was standing on the platform of his local railway station a train came in at the other platform. Just then a stranger approached him and said:—

"Are you a mathematician?"

Our colleague replied that he was not, and the stranger went on:—

"But you know something about mathematics?"

"Well, I suppose I do," was the reply.

"Good," said the stranger. "Now look at the large wheel on that locomotive. It is, say, 12 ft. in circumference. The distance between this station and Glasgow, where the train has come from, is 23 miles. How many revolutions has that wheel made on the journey?"

"I just couldn't tell you," said our colleague.

The stranger snorted and said, "It's clear to me that you don't know anything about mathematics," and he walked away. —*From "The Glasgow Herald."*

* * *

"For Dipping Into"

The fifteenth edition of the remarkable "Railway Handbook" is just out. The Railway Publishing Company, of Tothill Street, thus provides, in exchange for only five shillings, many more than five thousand facts relating to trains and their management. Indispensable no doubt to those whose business is with railways in one way or another, to the mere dilettante it is a source-book of richness. It is for dipping into, as the reviewers say of anthologies. One must choose carefully according to one's mood and circumstances, of course.

The comprehensive section on "Noteworthy British railway accidents" is not to be read upon entering one's train at Euston or London Road. Better then to browse among "long stretches of straight line," and learn that the Australian Transcontinental runs like a ruler for 328 miles across the Nullarbar Plain. Or to drop off while dreaming of walking up the 2,415 feet of the platform at Sonepur, the longest in the world.

Is your compartment crowded, and does it contain tedious infants? Then console yourself with the fact that on August 24, 1840, no fewer than 2,400 passengers travelled in one excursion train on the Midland Counties Railway.—*From "The Manchester Guardian."*

Fighting Ticketless Travel in Pakistan

The North Western Railway has been carrying out an untiring campaign against ticketless travel, and its Publicity Department has been placing advertisements, such as that reproduced, in all the leading papers of Western Pakistan.

* * *

"Iron & Steal Bill"

"The compensation proposals are based on a 'rigged' market. The title of the Bill should be altered to the 'Iron & Steal Corporation Bill.'"—*Mr. Oliver Lyttelton in the House of Commons.*

* * *

"At the Mercy of Minor Civil Service Clerks"

Mr. Justice Hilbery, sitting in the King's Bench Division, elicited from a witness that he had been employed by a Regional Petroleum Office as a Grade 3 clerk at £5 a week to deal with applications for supplementary petrol coupons. Very few such applications, it was stated in reply to another question by the Judge, went up to the control officer. In other words, applications which may vitally affect the daily work of a doctor, a clergyman, a business man or many other, are decided for good or ill by a £5 a week clerk. It helps very little to say that there are general rules which the staff must follow. In at least half the cases of application for supplementary petrol, special, not general, considerations are put forward; whoever decides on them, it ought to be someone substantially higher than Grade 3. And this, of course, is happening in every Government office. It means that in one way or other tens or hundreds of thousands of businesses are at the mercy of minor civil service clerks. It may be that as things are, since controls must be, the volume of work is such that minor civil service clerks must be employed on it. There is, of course, no ground for criticising the clerks themselves. It is the system that needs criticism—and needs altering at the earliest moment possible.—*Janus in "The Spectator."*

* * *

Tailpiece

STAGGERED

When I consider how my time was spent
In the pre-staggered age—how I enjoyed
Life's golden hours, I felt somewhat
annoyed
To find my weary, lagging footsteps bent
In duty's path at hours till then employed
Only by milkmen and those dismal wights
Whose working days had overlapped their
nights.
Howbeit I unwillingly present
Myself at times unseemly on the mat,
Pro bono publico, 'twixt eight and nine,
Sharing the dewy dawn with a stray cat.
Stifling th' insistent impulse to repine,
I strive, as ever, to remain benign,
Though at my age I find it most absurd
To bear the banner of "The Early Bird."

A. B.

OVERSEAS RAILWAY AFFAIRS

(From our correspondents)

SOUTH AFRICA

Results

During July the operation of the railway, harbour, steamship, airways, and aerodrome services resulted in a deficit of £27,590. Revenue amounted to £7,425,621 and included improved receipts from goods traffic and harbour dues. Expenditure, excluding net revenue appropriations, totalled £7,410,745. In the four months April-July, the railways returned a deficit of £1,323,993, and airways and aerodromes a deficit of £119,595. The operation of the harbours reflected a surplus of £816,723, and steamships a surplus of £12,104. The deficit on working all services for these four months was £614,761 which, when net revenue appropriations of £167,124 are added, yields a total deficit of £781,885.

Railway earnings in the week ended September 4 amounted to £1,405,764, the highest total ever attained. The previous record was established in the week ended December 6, 1947, when the earnings were £1,393,842. Harbour earnings, which have been at a high level for some months, amounted to £126,189 in the week ended September 4. This was a new record which exceeded that of £124,491, earned in the week ended August 28, 1948.

In the four weeks ended August 28, 1948, traffic sent inland from Union ports amounted to 296,575 tons; most of this was consigned to the Witwatersrand. Coal transported in the same period amounted to 1,570,742 tons as compared with 1,572,151 tons in the corresponding period of 1947. The quantity of coal exported decreased from 198,079 in August, 1947, to 137,879 tons in August, 1948.

In August the export of cereals was intensified. During the week ended August 21, the number of trucks ordered for this traffic was 2,400. At Cape Town 11,000 tons of maize were shipped, and at Durban 22,000 tons. In Natal the sugar cane industry required the exclusive use of 800 trucks throughout August.

NIGERIA

New Locomotives Move Greatly Increased Oilseed Tonnage

The twenty new 2-8-2 type main-line locomotives manufactured by Vulcan Foundry Limited, were all in full service at the end of June, and the immediate result was a substantial increase in the rate of haulage of oilseeds to the ports. Whereas, in May the total tonnage hauled was only 17,394 tons, the figure had increased to 20,400 in June, 30,076 in July and 33,576 in August. The September figure showed a slight decrease which, however, was mainly due to the necessity of conveying by rail a large quantity of livestock in connection with the Id El Kabir, Mahommedan festival.

These locomotives are giving good results generally, and they are popular with the African staff. The average mileage per locomotive for the first complete month in service exceeded 4,000.

Financial Results

Gross revenue for the first 26 weeks of the financial year, to September 25 last, shows an increase of £525,553. This is approximately £100,000 below the proportionate estimate for the period made after the rates revision which took effect from April 1 last. In the meantime costs are still rising, and although there has been no general increase in wages and salaries, there have been several sectional concessions and an award of credit for war service which total a considerable sum.

The rates revision referred to, besides absorbing the war surcharge, has increased rates mainly on those commodities best able to bear them, such as exports and high-grade imports.

New Coal Hopper Wagons

The 50 new coal hopper wagons, supplied during the year by the Metropolitan-Cammell Carriage & Wagon Co. Ltd., are now all in service. The ease with which the coal now can be discharged into the coal conveyor plant cells at Port Harcourt has resulted in greatly improved wagon turn-round, with a corresponding improvement in operating efficiency.

NEW ZEALAND

Electrification of North Island Main Line

The Minister of Railways has discussed recently with engineers from two large British firms the question of the electrification of the North Island main line.

The capital cost of electrification will be great, but it is stated that the country's coal supplies are insufficient for the demands of steam-hauled trains.

One of the consulting engineers recently has carried out electrification work in India and the other has been engaged on similar work in Mexico. It is proposed to electrify the line in stages.

CANADA

Rail Link with Alaska Envisaged

Plans to extend the Pacific Great Eastern Railway, owned by the Government of British Columbia, to Alaska have been reported. Correspondence between the United States and the British Columbian Governments wherein it was indicated that private capital was available to construct the greater part of the railway to Alaska and for the development of affiliated natural resources in British Columbia, has been published.

The railway, now comprising 347 miles of track from Squamish, near Vancouver, to Quesnel, 50 miles south of Prince George, was begun in 1912 to provide a rail link between Vancouver and the "great northern empire." Since then numerous unsuccessful attempts have been made by the British Columbian Government to finance additional construction.

United States Senator Magnuson has stated that for more than a year the president and chief engineer of the Canadian Alaska Railway Company had been working closely with him and with various United States Government agencies involved.

UNITED STATES

Rehabilitation of the Alaska Railroad

A $50,000,000 rehabilitation programme to rehabilitate the Alaska Railroad is in progress.

When the 25th anniversary of the driving of the golden spike on the line by President Harding was commemorated on July 15 last, the general manager said that when the building projects were completed, the Alaska Railroad, owned in part by every American taxpayer, would provide railbelt customers with swift, dependable service and speed Army equipment and supplies, essential to America's plan to make Alaska an impregnable outpost of defence.

The main line, stretching from Seward, on the Gulf of Alaska, 470 miles north to Fairbanks in the heart of the territory, and probably the farthest north railway in the world, was opened in June, 1923. Although never in good shape and held together by expensive patching and mending, the line had a heavy wartime load to handle, and struggled through from 1942 to 1946, with the help of Army equipment and personnel. It has operated at a loss for years, although the Government poured some $73,000,000 into it.

Colonel J. P. Johnson took over management in January, 1946, after wartime command of Army transport in different war theatres and almost 30 years of railway experience. He outlined at once the present programme for complete rebuilding. For the first year, the line has contracted or already completed about $21,000,000 of work, such as car conversion, roadbed work, purchase of 200 miles of steel rails, fittings, and sleepers, new buildings, rolling stock, and overhaul.

SWITZERLAND

Duplication of Main Lines

At present only one new line is under construction. It is between Geneva Cornavin station and Praille, and it will be extended eventually either to Geneva Eaux-Vives station (the terminus of the French National Railways) or to another point on the French railways. Prominence has been given, under the stimulus of increasing traffic, to the doubling of some single-track main-line sections, work on some of which is already in progress.

These are Romont-Chénens, and Matran-Fribourg (Lausanne-Berne line); Boudry-Auvernier, and Oensingen-Olten—Hammer (Lausanne-Neuchatel-Olten line); Melide-Maroggia-Melano (Lugano-Chiasso line); Siebnen-Wangen—Ziegelbrücke, and Unterterzen-Flums (Zurich-Coire line); and Winterthur—Winterthur-Grüze (Zurich-St. Gall line). The duplication of the Melide-Maroggia section necessitates the widening of the dam which carries the line across the Lake of Lugano. The Gotthard line will then form virtually a double-track route throughout, as the single-track section alongside the Lake of Uri is already being doubled.

The doubling of a number of sections has been described as one of the most important tasks of the Federal Railways. There remain 1,068 route-miles, or 59 per cent. of the whole system, to be doubled. Services on some single-track sections have reached saturation point and a change has become an urgent necessity. The immediate programme envisages the doubling of 143 track-miles.

DENMARK

Swiss Dynamometer Car on Loan

For the third time since the Danish State Railways began a rehabilitation programme after the country's liberation in 1945, they have taken on loan the dynamometer car of the Swiss Federal Railways with a view to surveying the tracks of their whole system. The car was recently attached at Basle to the Swiss section of the Scandinavian express, and was taken over by the Danish State Railways at Padborg frontier station on October 12.

Pneumatic-Tyre Train on the French National Railways

First streamline train with Michelin-design chassis has undergone trials on the Paris-Strasbourg line

IN our February 27 issue we described the rubber-tyre coaches which were being built for the French National Railways, and two illustrations of them appeared in our July 30 issue. The first of three six-coach sets, of which the chassis have been designed by the Michelin Company after exhaustive research, based on the firm's long experience with pneumatic-tyre railcars, has been completed and recently performed trial trips between Paris and Strasbourg.

The new train is expected to go into regular service shortly and will replace the present train, composed of orthodox lightweight coaches, weighing 310 tons in all, leaving Strasbourg at 6.53 a.m. and arriving at Paris Est at 12.40 p.m., and the corresponding return working, dep. Paris Est 5.45 p.m., arr. Strasbourg 11.35 p.m. Stops are made at Lérouville and Nancy. The 4-6-0s which haul this train and will haul the pneumatic-tyre train are shedded at Strasbourg (Haustbergen), and are a batch of 12 which have been converted to oil burning and are partly streamlined. Diesel haulage is envisaged ultimately.

Official Inspection

On November 4, M. Pineau, Minister of Public Works & Transport, and M. Dorge, Director General of Transport in the Ministry of Public Works, accompanied by M. Marcel Flouret, President, French National Railways, M. Maurice Lemaire, General Manager, M. Armand, a Deputy General Manager, and M. Bourrel, General Secretary, French National Railways, M. Margot-Noblemaire, General Manager, Wagons-Lits Company, M. Bourdon-Michelin, Director, Michelin Company (France), and other officials travelled on the train from Paris to Châlons-sur-Marne.

Departure from Paris Est was at 2.30 p.m. and arrival at Châlons at 4.23 p.m. The average speed was 75 m.p.h. and running was smooth, silent, and comfortable, as a result of the suppression of pounding at rail ends. At that speed, a conversation could be held in the coach without raising the voice. Reduction of shocks and vibrations was the main advantage claimed by M. André Michelin, when the first Michelin pneumatic-tyre railcar appeared in 1931. At Châlons the party spent 1½ hr. visiting the new locomotive depot and the railway workshops.

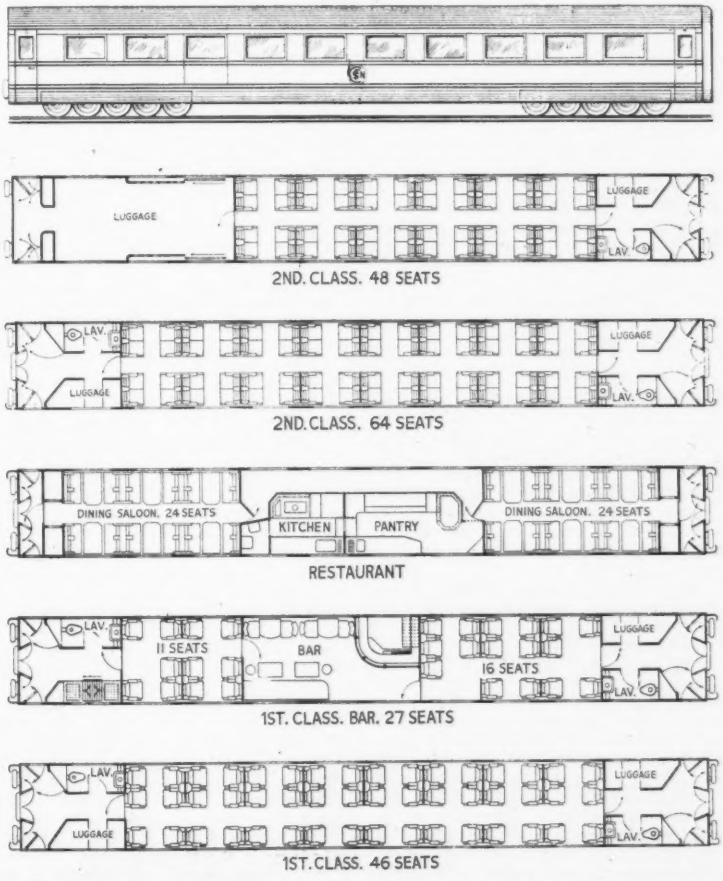
The completed set comprises one composite coach (van and 48 second class seats); two second class coaches, with 64 seats each; one dining car to seat 48; one coach with refreshment bar and small tables, also seating 27 first class passengers; and one first class coach with 46 seats. There is a central corridor and fluorescent lighting, which can be controlled by the passenger. Ventilation and heating are regulated by forced air and blowing fans, the latter intended mainly for use in summer. Moquette, made of soft textile materials, is used for the coach flooring.

Limited Weight on Tyre

As the load on each pneumatic tyre is limited to one ton, the coaches are necessarily light and the wheels numerous. The tare weight of each coach is 17 tons (compared with 40 tons for an ordinary coach), and the loaded weight about 21 tons. Each coach is mounted on two 10-wheel bogies, made of high-tensile steel, whereas the existing rubber-tyre railcars designed by the Michelin Company have four-axle bogies. The wheels are all fitted with rubber tyres, on a lorry-type hub, with a normal railway-type flange.

Should a tyre fail, a compensatory balance system distributes the load over the other four axles, allowing the coach to run for some time without slowing down. Metal shoes make contact with the running rails for track circuiting.

The coaches are equipped with a semi-automatic coupler which incorporates "Bibax" rubber blocks. The brakes themselves are of the road vehicle type, operating on an oleo-pneumatic system. Each bogie is fed by a special oil circuit, with a Lockheed master-cylinder linked to a compressed-air reservoir, which replaces the usual brake cylinder. Each wheel



Diagrams showing the interior arrangements of the pneumatic-tyre coaches

has a large-diameter brake drum. Instead of buffers, there are balloon-tyre type shock absorbers or bumpers.

Bodywork of the Coaches

The bodies of the six completed coaches are built of stainless steel, on the Budd principle, by Carel, Fouche & Company; they are 18 per cent. chromium and 8 per cent. nickel, and welded. In the second train, riveted Duralinox, an aluminium alloy, is used, and the third train has welded bodies of mild steel. These latter sets, which are expected to be ready for service early in 1949, have bodies by the Compagnie Industrielle de Material de Transport, and Brissonneau et Lotz respectively.

Two sets will maintain the service, and one will be kept in reserve. The present fastest schedule for the Paris-Strasbourg journey is 5 hr. 50 min. eastbound, and 5 hr. 47 min. westbound.

On a preliminary trial run on October 29, the train ran from Paris Est to Strasbourg, stopping at Lérouville and Nancy. A speed of 80 m.p.h. was recorded on the return journey.

End view of rubber-tyre coach, showing the special design of bumpers which have replaced buffers

Improved Wagon Turn-Round in Western Germany

Increased availability of wagons and locomotives is aiding economic recovery

By R. de K. Maynard, C.I.E., M.Inst.I.

AN important factor in the economic recovery of Western Germany is the availability of goods wagons. During the first eight months of this year there has been a steady improvement in the number of wagons allocated for loading and in wagon turn-round, as will be seen from the following figures for the combined British-United States zone:—

Week ending (1948)	Average operating stock of wagons	Average daily allocation of wagons	Turn-round in days
Jan. 3 ...	205,539	21,178	9·7
Mar. 6 ...	207,091	29,994	6·9
June 5 ...	196,660	32,301	6·1
Aug. 14 ...	203,778	36,986	5·5

A number of causes, some of which have a bearing on each other, have contributed to this improvement, but probably the most outstanding has been the increase in the number of serviceable locomotives available. At the beginning of the year some 6,700 locomotives were available for all services; by the end of August, principally because of the speeding up in the rate of repair, this figure had increased to about 7,300. In the earlier months of 1948 it was a daily occurrence for many goods trains to be stabled, waiting for engines to move them forward. This is no longer the case and wagon use is not being lost now on this account. The greater number of shunting locomotives also has been responsible for quicker passage of wagons through yards and better marshalling at terminal points.

Another factor contributing materially to improved turn-round has been the repair and restoration of lines, and equipment at stations and in yards. Statistics are maintained showing the average detention to wagons in the major marshalling yards; over recent months, with few exceptions, as the work of restoration progressed and more locomotives became available, this detention has been reduced. For example, in the much-bombed yard of Hamm, which deals with some 4,500 wagons on weekdays, the average detention to a wagon is slightly over six hours.

On June 21, 1948, the new currency came into force and the Reichsmark was replaced by the Deutsche Mark. For several reasons this has contributed indirectly to improvement in the turn-round of wagons in the combined zone. In the first place the Reichsmark had little real monetary value and traders could afford to hold up wagons at loading and unloading points and incur demurrage. This is no longer the case since the Deutsche Mark came into circulation. Concurrently with the introduction of the new mark the Reichsbahn increased the rates payable for demurrage, thereby providing an added incentive for avoiding payment of this penalty. The introduction of the new currency has had also a definite positive side. There has been undoubtedly a great improvement in efficiency in all branches of work, largely because of the marked betterment in the food and clothing situation. The reduction in absenteeism among railway workers, particularly noticeable, has played its part in effecting improvement in operating results in recent weeks.

Finally, the discontinuance since June of the interchange of traffic between the combined zone and Berlin and the Soviet Zone has tended towards the lower figure of wagon turn-round. Before this traffic ceased to move, a considerable quantity of coal was loaded in the Ruhr for Berlin and places in the Eastern Zone. This was a long load traffic, not giving a good turn-round figure, and in recent weeks wagons previously engaged in conveying it have been relegated to the carriage of shorter distance traffic.

It will be appreciated that the movement of coal plays an important part in the economy of Western Germany and in wagon turn-round, when it is stated that in the last week of August, which may be regarded as a representative period, out of a total of 267,433 wagons allocated for all traffic no less than 73,556, or 27·5 per cent., were allocated for coal. Nearly 60,000 of them were supplied to mines in the Ruhr, and 100 per cent. of the demands were met.

The harvest traffic in Western Germany is beginning already to move and in a few weeks should be in full swing. Provided that nothing untoward occurs to interrupt the progress so far accomplished, the Reichsbahn stands better equipped to deal with it than in any other period since the war ended.

B.S.A. TOOLS LIMITED.—The Small Tools Division of B.S.A. Tools Limited has removed from Mackadown Lane, Marston Green, to Montgomery Street, Sparkbrook, Birmingham. All communications (except accounts) should be sent to this address.

TRAVEL CONCESSIONS BY BRITAIN AND U.S.A.—It is announced that the British Government has abolished the visa requirement for United States citizens visiting this country. At the same time the United States has responded by abolishing the fees charged for temporary visas for British subjects to the U.S.A.

END OF NEWFOUNDLAND RAILWAY STRIKE.—The railway strike which began in Newfoundland on October 11 now has been settled. A general increase of 10 cents an hour with $20 a month to salaried workers has been granted. As was reported in our issue of November 5 the unions had asked for an increase of 15 cents an hour.

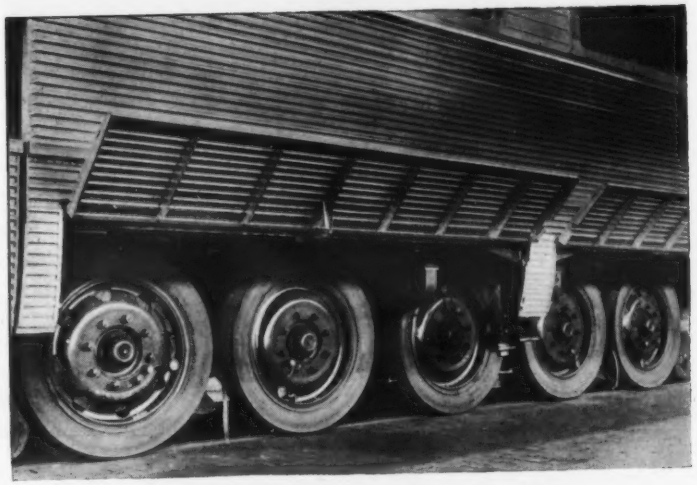
Pneumatic-Tyre Train on the French National Railways

Refreshment bar in first class coach

First class coach

Two views showing the interior of one of the second class coaches, with seats for 64

Pneumatic-Tyre Train on the French National Railways



Close-up of bogie, with steel covering raised

Rubber-tyre wheels and track-circuit shoe

Spare wheel carried below the coach

Kitchen compartment of dining car

The Settle & Carlisle Line

(See editorial article on page 568)

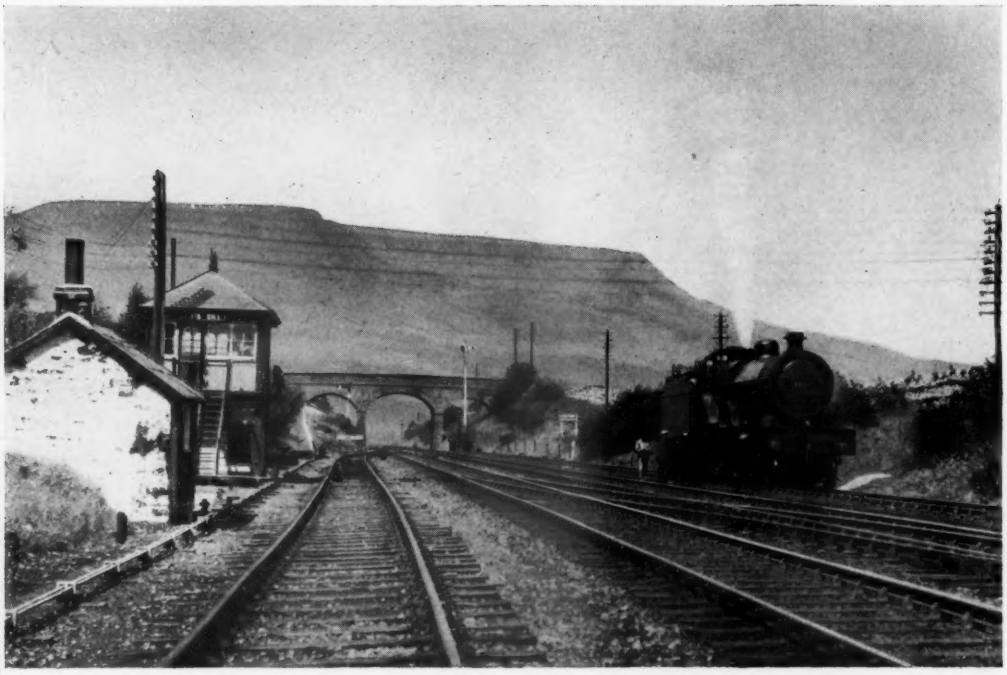
Dent Head Viaduct from Gayle Moor, Leeds-Carlisle line, L.M.R.

The highest water troughs in the United Kingdom; Garsdale

Photos] [W. Hubert Foster

The Settle & Carlisle Line

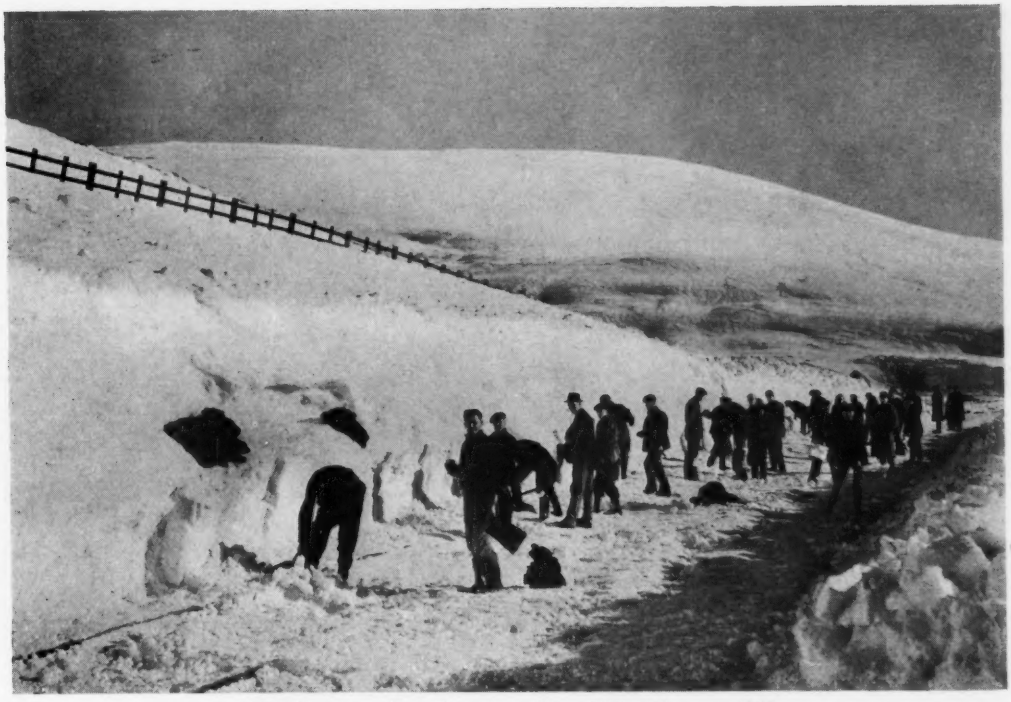
Settle-Carlisle section, L.M.R.; Ormside Station looking north



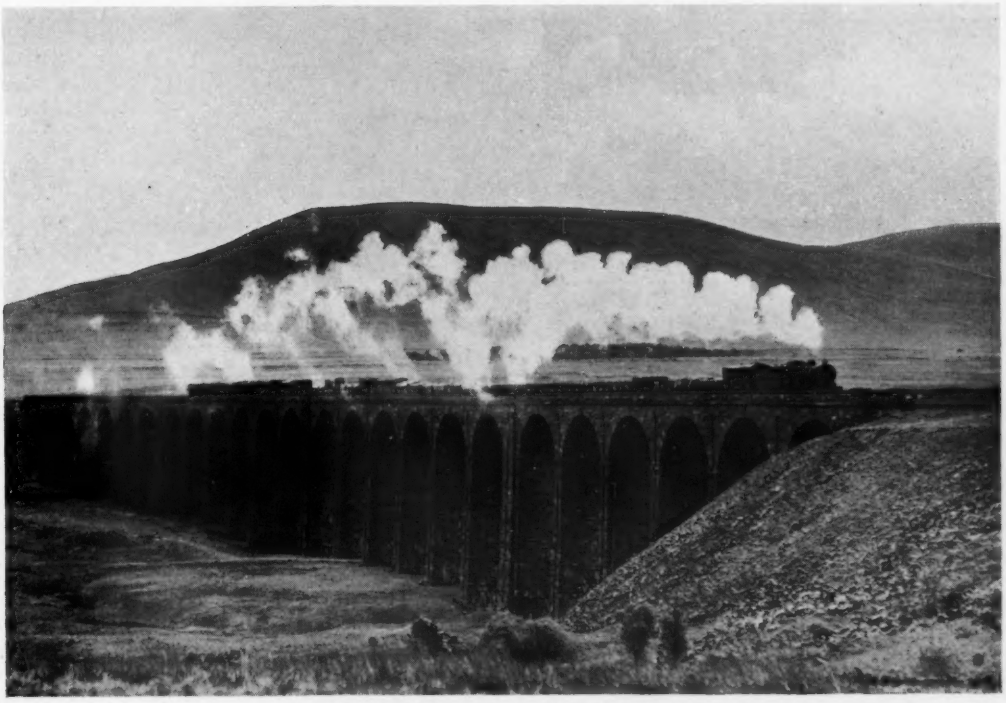
Ais Gill Summit, with pilot engine on right ; Wild Boar Fell is seen in the distance

Photos] *[W. Hubert Foster*

The Settle & Carlisle Line



Clearing snow from line near Arten Gill, February, 1947



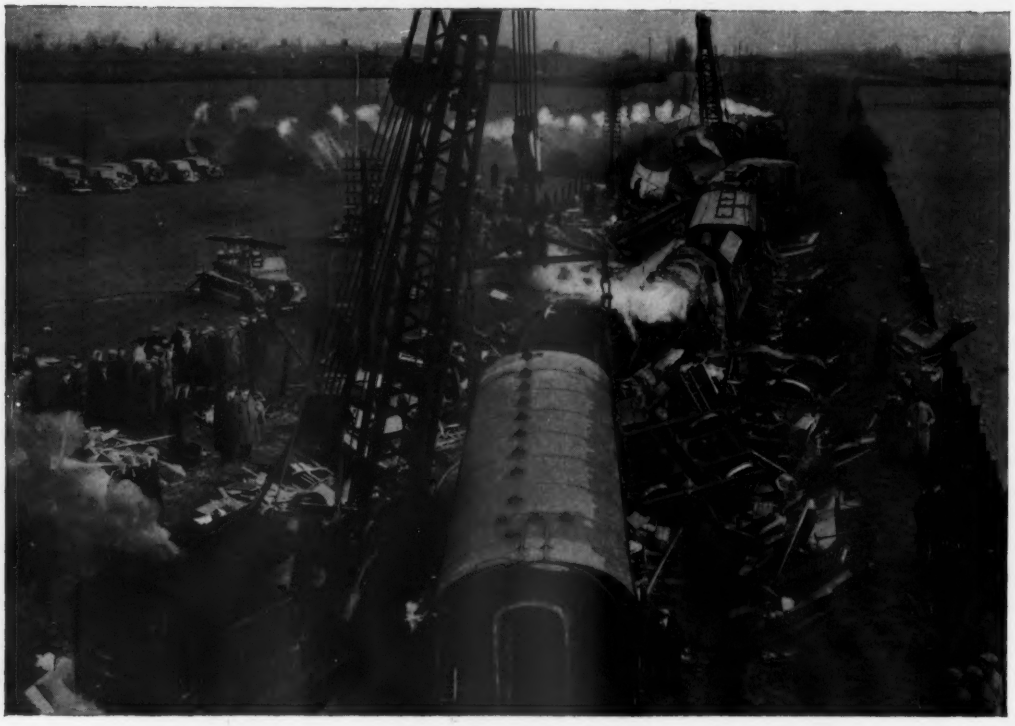
Ribblehead Viaduct seen from Blea Moor

Photos] *[W. Hubert Foster*

Winsford Accident, London Midland Region

(See article on page 587)

Wrecked locomotive and coaches at Winsford, L.M.R., after the collision



Breakdown cranes at work at Winsford, Cheshire, on April 17, 1948

RAILWAY NEWS SECTION

PERSONAL

MEMORIAL SERVICE FOR LORD ASHFIELD

A memorial service for Lord Ashfield, a Member of the British Transport Commission since its inception, and previously Chairman of the London Passenger Transport Board, who died on November 4, will be held at St. Martin-in-the-Fields on November 26 at noon.

Mr. S. J. L. Hardie has relinquished the Chairmanship of Sentinel (Shrewsbury) Limited. Mr. E. Carnegie has accepted an invitation to join the board and will become Chairman. Mr. W. P. Wrathall has resigned from the board.

The Minister of Transport has appointed Mr. T. G. Newcomen to be Divisional Road Engineer, Eastern Division, in succession to Lt.-Colonel R. W. Butler, who has retired. Mr. C. E. Hollinghurst has been appointed an Assistant Chief Engineer at headquarters to succeed Mr. Newcomen.

The late Sir Robert Gales, the distinguished railway and bridge engineer, who was Chief Engineer, Indian Railway Board, 1915-17, Agent of the North Western Railway (India), 1917-18, and afterwards for many years a Partner in the firm of Rendel, Palmer & Tritton, left £15,688.

Dr. D. T. A. Townend has been installed as President of the Institute of Fuel.

Mr. D. K. Hislop has been appointed General Manager in the Middle East for Thos. Cook & Son Ltd., in succession to Mr. W. Jackson, who has retired.

We regret to record the death on November 9 of Mrs. Gertrude Thompson Whitelaw, widow of Mr. William Whitelaw, who was Chairman of the London & North Eastern Railway Company from 1923 until 1938.

We regret to record the death of Mr. C. C. Barker, who had been a Joint Managing Director & Secretary of Auto-Klean Strainers Limited since 1923.

BRITISH TRANSPORT COMMISSION

The British Transport Commission announces that a separate division has been set up in the Department of the Comptroller to deal with special matters which fall outside the scope of the other divisions. It will be known as General Division, and will be in the charge of Mr. W. M. Hind as Director. The post of Director of Funds, hitherto held by Mr. Hind, will be taken over by Mr. W. S. Morgan. The transfer of Mr. Morgan leaves vacant the post of Director of Audit, but the work of the Audit Division will be supervised by Mr. F. W. Burton, at present Assistant Director of Audit, in such contact with Mr. Morgan as may be necessary.

Mr. F. A. Pope, C.I.E., M.Inst.T., who is the first Chairman of the Ulster Transport Authority, established under the Transport Act (Northern Ireland), 1948, has been Chairman of the Northern Ireland Road Transport Board since the beginning of this year, and is a former Vice-President of the L.M.S.R. Mr. Pope was educated at The Leys School, Cambridge, and joined the L.N.W.R. in 1910. The principal appointments he had held with the L.M.S.R. up till his appointment in 1946 as a Vice-President were: Superintendent of Operation (1938-40); Manager, Northern Counties Committee, Belfast (1941-43); and Chief Commercial Manager (1943-46). He served with distinction in both world wars, attaining the rank of Major during his service in France and with the Salonika Force during that of 1914-18, when his awards included a mention in dispatches, the Greek Order of Merit, and the White Eagle of Serbia. In 1940 he was appointed Director of Railways, B.E.F., with the rank of Colonel. He was again mentioned in dispatches. After the evacuation from France he returned to the L.M.S.R. In his considerable overseas transport experience, Mr. Pope has held appointments as Divisional Superintendent and as Acting Superintendent of the Line, Nigerian Railway (1925-30); in 1932 and 1933 he twice visited India, when his services were lent to the Government of India as Chairman of a committee appointed to recommend measures for achieving greater efficiency and economy on the Indian railways. He went to India again in 1944-45 as Regional Port Director, Calcutta, and was made a C.I.E. in June, 1945. Towards the end of last year Mr. Pope relinquished his position as a Vice-President of the L.M.S.R. on accepting an invitation to become a member of the Northern Ireland Road Transport Board, of which he was designated Chairman from January 1 last. He is Chairman, Northern Ireland Section, Institute of Transport, for 1948-49.

Mr. F. A. Pope

Appointed Chairman of the Ulster Transport Authority

Mr. F. H. Layton has been appointed Transport Manager of W. H. Smith & Son Ltd., succeeding Mr. C. J. Williams, who is now Head of the Bookstalls Department.

Mr. A. G. Morley has been appointed Press Officer of Thos. Cook & Son Ltd.

Consequent on the transfer of the Weymouth-Channel Islands marine service from the Western to the Southern Region, Mr. W. G. Salmon, Quay Superintendent, Western Region, Weymouth, has been appointed Divisional Marine Manager, Southern Region, Weymouth.

We regret to record the death on November 14, at the age of 68, of the Rt. Hon. Sir Frederic Wrottesley, who retired last month from the office of Lord Justice of Appeal, and until recently *ex-officio* Commissioner for England under the Railway & Canal Traffic Act, 1888.

LONDON MIDLAND REGION APPOINTMENTS

The following appointments are announced:—

Mr. H. H. Matthews, Senior Assistant Architect, Civil Engineer's Department, Euston, to be Principal Assistant Architect.

Mr. J. Greenwood, Assistant District Operating Superintendent, London (Western), to be District Operating Superintendent, London (Midland).

Mr. J. C. Rogers, Assistant District Operating Superintendent, Leicester, to be Assistant District Operating Superintendent, London (Western).

Mr. A. D. Cochran, Assistant to Principal, School of Transport, Derby, to be Assistant District Operating Superintendent, Leicester.

Mr. L. M. Sayers, Operating Assistant, Liverpool (Cheshire Lines Committee), to be District Operating Superintendent, Liverpool (Cheshire Lines).

Mr. G. Mitchelhill, Assistant to District Goods & Passenger Manager, Derby, to be Assistant District Goods & Passenger Manager, Leicester.

Mr. C. J. Lamb, District Locomotive Superintendent, Burntisland, to be District Motive Power Superintendent, Edge Hill.

Mr. J. T. Wiggans, Station Superintendent, Holyhead, to be Stationmaster, Manchester (Victoria, Exchange & Salford).

Mr. J. L. Hadfield, Stationmaster & Goods Agent, Normanton, to be Stationmaster, Derby.

Lt.-Colonel D. McMullen

Appointed an Inspecting Officer of Railways in the Ministry of Transport

Mr. S. Williams

Appointed Signal & Telecommunications Engineer, L.M. Region, British Railways

Mr. J. Gillespie

Appointed Assistant Accountant, Scottish Region, British Railways

Lt.-Colonel D. McMullen, R.E., who has been appointed an Inspecting Officer of Railways in the Ministry of Transport, was commissioned in the Royal Engineers in 1921, and was seconded to the then Indian State Railways in 1925. In 1939 he reverted to military duties. He saw service with the B.E.F., and was mentioned in despatches. He proceeded overseas again in 1941, and in 1942 was appointed Chief Movement Superintendent of the Iraqi State Railways. Colonel McMullen was recalled to India in the next year, and was appointed Assistant Director, Transportation, Planning, on the Railway Board, and later Deputy Chief Transportation Manager (War) for the Bengal & Assam Railway. He again reverted to British service in 1945, and was appointed Controller of Railways, Allied Commission, Austria. In November, 1946, he returned to the Indian State Railways, on which he was appointed Divisional Superintendent, N.W.R. On partition, he became Chief Operating Superintendent, N.W.R. (Pakistan), which post he left in June, 1948, to take up his present appointment.

Mr. S. Williams, M.I.R.S.E., who was recently appointed Signal & Telecommunications Engineer, London Midland Region, British Railways, joined the Signal Department of the L.N.W.R. at Crewe in 1906. During the 1914-18 war he served overseas with the Royal Artillery; he was mentioned in despatches and was demobilised with the rank of Captain in September, 1919, after which he returned to his pre-war duties at Crewe. From 1920 his services were on loan to the Ministry of Transport for the remaining period of Government control of the railways, and he then returned to the L.N.W.R. at Crewe. In 1929 Mr. Williams was appointed Signal Assistant to Divisional Signal & Telegraph Engineer, Derby, L.M.S.R., and in 1931 he became Development Assistant (Outdoor) to Signal & Telegraph Engineer at headquarters. He was made New Works Assistant at headquarters at Euston in 1937, Indoor Assistant (Signals) in 1943, and Signalling Assistant in 1944. In 1946 he was appointed Divisional Signal & Telegraph Engineer at Manchester; and he was recalled to headquarters as Acting Assistant Signal & Telegraph Engineer in February this year.

The following telegram, signed by Sir Cyril Hurcomb, Chairman of the Commission, was recently dispatched to Their Royal Highnesses the Princess Elizabeth and Duke of Edinburgh by the British Transport Commission:—

All those engaged in the services of the British Transport Commission throughout the country send loyal greetings and best wishes for the health and happiness of the infant Prince.

Mr. James Gillespie, who has been appointed Assistant Accountant, Scottish Region, British Railways, joined the Caledonian Railway at St. Rollox Workshops in 1918. After experience in various departments he entered the Locomotive Accountant's Office, Glasgow, and in 1929 took charge of the Accounts Sub-Section dealing with new works, expenditure and statistics. In April, 1942, he was transferred, on loan, to the Ministry of War Transport, and appointed Investigating Officer in connection with the examination of the control (net) revenue account of the L.N.E.R. During 1945-46 he was closely identified with the programme of rolling stock renewals for all companies, and acted on behalf of the Ministry as examiner of contracts placed with private builders. In September, 1946, Mr. Gillespie returned to the L.M.S.R. as Works Accountant, Glasgow.

French Minister of Transport Inspects New Train

M. Maurice Lemaire, General Manager, French National Railways (left), M. Christian Pineau, French Minister of Public Works & Transport, and M. Marcel Flouret, President, French National Railways (right), in the restaurant car of the pneumatic-tyre train described elsewhere in this issue

Efforts to Integrate British Transport

Sir Cyril Hurcomb's review of progress and objectives

Sir Cyril Hurcomb, Chairman of the British Transport Commission and Past-President of the Institute of Transport, on Monday last read a paper entitled "Progress Towards the Integration of Transport," at a meeting of the Institute held in the Jarvis Hall, 66, Portland Place, London, W.1. Mr. David R. Lamb, President of the Institute, was in the chair.

Sir Cyril Hurcomb, in the course of his address, said that, taking railways first, there was now, as never before, a complete fusion of finance in the single undertaking of the British Transport Commission. While the railway Regions generally were based on the former company structure, the Railway Executive was untrammelled by inter-company financial considerations in its unified administration of British Railways.

The railway map had been tidied up as had been intended, but not done, after the amalgamation of 1923. At the beginning of 1948, six small lines, with a total route-mileage of 75 miles, had been absorbed into the Regions of British Railways and fourteen joint lines, accounting for nearly 700 route-miles, and many of the penetrations by one of the old companies into territory mainly served by another had been merged in the Region to which they could be most conveniently assigned.

Transfer of Systems

The main changes under this head included the transfer of the Cheshire Lines Committee system to the London Midland Region, of the Midland & Great Northern Joint Lines, and the London Tilbury & Southend Section to the Eastern Region, the Weymouth and Channel Islands steamer service to the Southern Region, a more convenient distribution of lines along the Welsh border between London Midland and Western Regions, involving mainly transfers to the latter, and of course the unification of former L.M.S.R. and L.N.E.R. lines in Scotland.

An important administrative change made possible by the new structure had been the creation in London of a single outdoor commercial organisation for the railways—which would be followed as rapidly as possible by similar arrangements in provincial cities served by more than one Region.

Much yet remained to be done before the unification of the railways was complete and the measures necessary for decentralisation and devolution had been tested and adjusted. To take one example, the various types and designs of locomotives and rolling stock evolved by the railway companies could be analysed and compared, with a view to determining as soon as possible what types were required for the future and what was the best design for each. In programmes of renewals, it would be wrong to spend too much of the accumulated funds merely on recreating old assets. It was necessary to build and plan for the future.

Carefully chosen teams of highly qualified experts working with a single aim under a single direction, in close co-operation with those responsible for the actual running of the machine and backed by an adequate organisation and equipment for research, such as would be introduced and extended to operational as well as technical fields, would do much to secure from unification advantages and economies which had never before been possible. It was necessary to know how far the internal efficiency of each form of transport could be carried before it was possible to determine at what cost it could provide the services for which it *prima facie* appeared to be best suited. At the moment one could not measure in terms of money the economies likely to be secured from unification and the overhaul and modernisation of equipment, including the basis on which the rolling stock should be maintained and renewed, and the position was obscured by the fact that the railways were still suffering seriously from arrears and shortages.

Before serious progress could be made in the integration of transport services as a whole, it was obviously necessary for the Commission, through the Road Transport Executive, to bring under its control and ownership a substantial proportion of the vehicles engaged in long-distance haulage. In recent months the Commission had acquired by voluntary agreement over 150 road freight transport undertakings, owning between them nearly 6,000 vehicles exclusive of another 4,000 vehicles, making 10,000 in all, which came over with the subsidiaries of the railway companies. Negotiations were continuing with many of the remaining undertakings which had offered themselves to the Commission, and by the time transfers under the compulsory procedure began on January 1 there should be ready a solid framework to which newly acquired undertakings could be attached.

On the passenger side, the Commission's most important acquisition had been the Tilling group of bus companies, owning between them some 8,000 vehicles, in which the railways had hitherto held only a half share or something less—an arrangement which has not led in practice to any substantial co-ordination.

The canal undertakings listed in Part 2 of the Third Schedule to the Act, have already been amalgamated and placed by the Docks & Inland Waterways Executive under the control of four Divisional Waterway Managers.

Until the Commission had acquired a sufficiently substantial proportion of the long-distance haulage undertakings and until the Road Transport Executive was in a position to consolidate and operate these undertakings, it was not possible to produce plans for the integration of these services with those of the railways and inland waterways. But the task of the Commission was precisely to make progress in this matter, and that is why no time had been lost in building up the fleet and taking possession of the instruments necessary to the development of policy.

What did integration mean and what did it involve? The integrated system was to be efficient, adequate and economical, and it had to serve the public, agriculture, commerce and industry throughout Great Britain. Efficiency meant that the system must be reliable, speedy, and safe; to be adequate, it must provide in some form, but not necessarily in every form in every place, sufficient means of conveyance to cover peak loads, seasonal demands and special occasions. To be economical, it must offer the maximum of service that could be provided from its share of the national resources in labour and materials at the lowest cost compatible with covering all its costs, including depreciation and the statutory amortisation of capital.

It might seem that this problem of integration was not made easier by the Act, which established separate Executives to operate road, rail, and water transport. The size and complexity of the initial task of welding together the separate units were sufficient reasons for separate Executives, but the fact that the Commission itself was the body charged with the duty of seeing transport as a whole imposed on the Commission a heavy responsibility, which could not be delegated. In conjunction with the Executive concerned, it was examining ways and means of co-ordinating the various services operated by the Executives, just as it was reviewing the entire charging systems now applied in inland transport as a preliminary to preparing the Charges Schemes called for in Section 76 of the Act, and the two inquiries had to be closely correlated.

Freedom in Choice of Service

The approach to the statutory objective was conditioned by certain limiting factors, the first of them being the obligation contained in the second clause of Section 3 to allow any person desiring transport for his goods between points where the Commission was for the time being providing regular goods transport services of different kinds, freedom to choose the service most suited to his needs. The Commission might guide traffic; it must not compel it into pre-selected channels; but from the national point of view it was clearly desirable to influence traffic as strongly as possible to use the means of transport which could be shown to be most economical in terms of real social costs.

The next limiting factor was the freedom of the "C" licence holder to carry his own goods over any distance. Figures given by the Minister of Transport showed that the increase in the number of vehicles authorised under "C" licences continued to grow; 27,630 in the first quarter of 1948, 28,866 in the second quarter, making a total of 56,496 for six months compared with an increase of 103,413 for the whole of last year. Some two-thirds of the vehicles so licensed appear to be under 30 cwt. and would no doubt be mainly engaged in local retail distribution. The use made of "C" licence vehicles was a circumstance to which the Commission had to have close regard in the planning of its own services and in fixing its charges. The question was not between road and rail, but between public and private transport, and all the Executives would be keen to provide trade and industry with a service at least as good as that in the past.

The third limiting factor was the duty laid on the Commission by Clause 4 of Section 3 to secure from the whole of its businesses, a revenue sufficient to meet all charges properly chargeable to revenue. The Act assumed that the trade and travel of the country as a whole could meet the totality of their costs. But costs continued to rise, and the prospect of obtaining more revenue by higher charges was, and would remain, unwelcome, even if they became inevitable. It was, therefore, essential that each step taken towards integration should add something to net revenue, either by increasing traffic or reducing costs and improving efficiency, and here it might not be inappropriate to point out to traders and industrialists generally, and particularly to any who might be thinking of resorting to private transport, that public transport could pay its way only if it was adequately patronised wherever it could give good service. The vast capital sunk in the railway network could be made to yield a good return only

if it was used to somewhere near capacity. To give effect to a policy of integration, it was important that the relevant portions of the organisations of the various Executives should be closely interlinked. For this purpose it might seem an ideal requirement that the divisional boundaries under each Executive should coincide. But for railways these boundaries were primarily determined, so far as Regions were concerned, by operating and engineering considerations, and it was fortunate that these particular considerations happened to be comparatively irrelevant, or at least present no serious difficulties, in securing integration, as each form of transport had its own separate technique of operation, and road transport had no counterpart of its own to railway civil engineering.

In a commercial organisation designed to sell the service of transport, the common factors predominated, so that the advantages of close correlation and indeed the need for it were imperative. The main lines of commercial policy had to be laid down from respective headquarters and would eventually be largely guided by the principles on which charges schemes are based, but commercial officers dealing direct with the customers of the undertaking must have latitude in their handling of daily and detailed transactions. The engineering and operating organisation of the railway system had to follow the main outlines of the physical railway network, and technical officers had to conform to the technical standards and practices common to all parts of the undertaking, but commercial organisation could be more elastic. As the Road Transport Executive developed and came to provide extensive services by road, it would be important to ensure that the commercial organisation of the three Executives on the goods side fitted in reasonably with one another, though their districts and divisions might not absolutely correspond in number, location or area. In time, it would be necessary to move further and further towards a position in which transport as such would be sold in each large centre by an organisation which would act as a whole, even though it consisted of separate parts. At town and district levels, the point of contact with the customer, a common commercial organisation must be the aim.

Pending complete control of alternative services and presentation of new schedules of charges, certain steps had or were being taken to integrate the existing services of the Commission. The Road Transport Executive was being given full details of the traffic on certain branch lines where existing rail services were unremunerative, so that it could consider what it would cost it to convey the traffic, while the Railway Executive calculated what it would save by withdrawing its local service. The scope for closing the smaller intermediate stations on main lines and serving them by road from the larger stations was also under joint consideration.

Certain flows of long-distance road traffic were also being examined in detail to see what would be involved in trunk haulage by rail linked with radial collection and delivery at each end by the vehicles of the Road Transport Executive.

On the passenger side, it would take time to formulate area schemes. It might be necessary to accelerate the abandonment of unremunerative branch railway lines and to close to passenger traffic many little-used intermediate stations, provided adequate and equally convenient services could be given more economically by road.

Integration should eventually result in using the most economical means of transport for particular types of traffic, but in practice there would always be found a good deal of overlap. Before assigning in imagination all traffic solely to the form of transport which seemed most ideally suited for it, one had to bear in mind that no railway system could be maintained and operated at a profit unless it handled a volume of traffic which would meet the costs of expensive permanent way and equipment which were indispensable at times of high commercial activity or national emergency.

Charges

As charges would be the principal means of guiding traffic to the means of transport that could most economically carry it from a national standpoint, charges policy was probably the key to effective integration.

Certain preliminaries were well in hand. It ought to be possible to establish more or less common conditions of carriage, and on this good progress had been made. The next problem was to arrive at a common or as nearly as possible common classification, which would simplify the 21 classes of the existing railway scheme. The practical difficulties in allocating to each consignment or traffic conveyed by rail its precise proportion of overhead costs were formidable and possibly insuperable, but there was no doubt that a revised classification applicable alike to traffic conveyed by rail, road or water must pay less attention to the value of a commodity and much more to what had been called its "loadability."

In determining the quantum of the new rates themselves, a broad general principle which would have obvious attraction, but to which he could not commit himself, would be to aim at road and rail rates that were approximately equal for medium distances, lower by rail than by road for long hauls, and higher by rail than by road for short hauls, except for low-grade traffic travelling short distances to works or for shipment. This would mean adapting the principle of taper already inherent in rail rates for goods. It was urged in some quarters that this principle should be introduced into passenger fares with the object of bringing longer journeys within the scope of the more limited purses, a proposal which would undoubtedly appeal to Scottish interests who, though proud of their geographical position, had always felt that it placed them at a certain disadvantage. In any case it was necessary to face the great existing disparity between many rail fares and the corresponding road fares.

Discussion

In opening the discussion the President conveyed a vote of thanks to Sir Cyril Hurcomb for his lucid explanation of the principles that were guiding the British Transport Commission in its efforts to integrate transport throughout the country. Among those who participated in the discussion were Sir Osborne Mance, Sir Joseph Nall, Mr. E. G. Marsden, and Mr. R. Davidson. General agreement with Sir Cyril Hurcomb's remarks was expressed, and the need for an examination and adjustment of the rates structure for all forms of transport was stressed.

Attention was called, also, to the difficulties under which the railways were now labouring, and, particularly, the disparity between the present relatively high rail fares and the ultra-cheap road fares. It was urged that if certain unremunerative branch lines and roadside stations were closed, care should be taken to ensure that passengers did not suffer any reduction in facilities.

New Construction Work in South Africa

In introducing the Railway Construction Bill in the House of Assembly recently, the Acting Minister of Transport stated that the two new lines, one from Grootvlei to Redan, and the other from Vandyksdrif to Broodsneyersplaas, were necessary and urgent as they were related to the industrial development of the country. Both lines had been recommended by the Railway Board in its report to Parliament.

The Redan-Grootvlei line will be 40·8 miles long and its estimated cost is £1,790,802. It will supply the Klip Power Station with coal from a new source of which production, it is expected, will last for 47 years. The power station will purchase about 2,500,000 tons of coal a year from the mine to be served by the new line. It is estimated that, when completed, the line will yield a profit of £20,000 or more a year, as, in addition to coal traffic, it will serve a good agricultural area.

The Broodsneyersplaas line will be an extension of Oogies-Vandyksdrif line completed recently as a guaranteed line to serve a new coalfield in the Witbank area. It will be 11·7 miles long, and its estimated cost will be £404,217, or an average of £34,548 a mile. The line, which is expected to be competed within two years, is being built with the primary object of supplying coking coal to the Vanderbijl steel works at Vereeniging, and will serve other new collieries. It is estimated that by 1953 it will carry up to 150,000 tons of coal a month.

The Government, said the Minister, had to be cautious before embarking on the construction of new lines, as since 1939 the cost of construction had increased by 200 per cent. Such new construction, therefore, could only be entered into if it was clear that a line was urgently necessary and if the prospects were that it would not be run at a loss to the State. In the case of these two lines, according to the investigations of the Railway Board and the departmental engineers, there was no doubt that these two requirements were fully met.

The Bill has been passed as the Railway Construction Act, No. 42 of 1948, and the expenditure of the amounts involved has thus received parliamentary sanction. In the supplementary estimates for the current financial year the sum of £100,000 has been voted to begin work on these lines. The new coal line from Oogies to Vandyksdrif was guaranteed by the coal owners against loss for a period of ten years. As it now is yielding a considerable profit the coal owners have been released from their guarantee under section 6 of the new Act of 1948.

INSTITUTION OF RAILWAY SIGNAL ENGINEERS.—At a technical meeting of the Institution of Railway Signal Engineers, to be held at the Institution of Electrical Engineers, Savoy Place, London, W.C.2, commencing at 6 p.m. on November 29, there will be three short papers of about ten minutes duration each. Mr. Albert Barnes, Associate Member, will deal with: "The Labelling of Wires in Signalling Circuits," Mr. J. E. Mott, Member, with: "Automatic Train Control—The Link Between the Track and the Moving Train," and Mr. F. W. Young, Associate Member, with: "Some Comments on the General Application of Signal Arm Proving."

Ministry of Transport Accident Report

Winsford, London Midland Region, British Railways: April 17, 1948

LT.-COLONEL G. R. S. WILSON inquired into the collision which occurred at about 12.27 a.m. on April 17, 1948, at Winsford, about 8 miles north of Crewe, when the 6.25 p.m. postal express, Glasgow to Euston, composed of 13 bogie vans drawn by Class "7" 4-6-2 type engine No. 6251, which had entered the block section under false clear signals, collided with the 5.40 p.m. passenger express, also Glasgow to Euston, composed of 10 bogie vehicles, drawn by Class "7" 4-6-2 engine No. 6207, stopped out of course by a soldier, who wished to reach his home nearby, pulling the communication chain in a lavatory compartment and leaving the scene directly the train stopped.

The speed of the colliding train was about 40 to 45 m.p.h., having been reduced when the driver saw the red light carried by the passenger train guard about 400 yd. in rear of it; detonators were exploded. The impact demolished the rear coach of the passenger train and there was severe telescoping in the postal train and much other damage.

It was fortunate that the brakes of the standing train were off. Sixteen passengers were killed and 8 fatally injured, all in the last two coaches. Fourteen passengers and four Post Office staff were detained in hospital, eight being discharged within a week, and 12 passengers and 2 guards were treated for minor injuries. As soon as information reached the signal box in the rear, assistance was summoned promptly and speedily arrived. The guard of the postal train, though he had severe chest bruises, persisted for a long time in rendering first aid, including the setting of a passenger's broken arm. Both lines were blocked by wreckage, with serious effect on all traffic between Crewe, Liverpool and the north, but running could be resumed on both lines in some 20 hr. The weather was fine and clear with moonlight.

The accompanying diagram shows the lines, signals, and so on, essential to an understanding of the accident.

The London Midland Region's standard class "C" block controls are in use, as practically everywhere throughout the London-Carlisle main lines, the effect of which is to lock the signal controlling the entrance to a section until "line clear" is received, when its lever becomes free to be operated once only. At the box in advance, the signals must have been restored correctly behind the preceding train for "line clear" to be given, and a berth track circuit in rear of the home signal—and at Winsford Station another one in advance thereof—when occupied, places or maintains the block indicators for the section at "train on line." There is nothing, however, to prevent the irregular clearing and operating of the block with a train stopped in section clear of the berth track circuit.

The Course of Events

The postal train, if running normally, should overtake the passenger train at Lancaster, but it was late and the order of the trains had been reversed. The passenger train passed Winsford Junction at 12.9 a.m. and the postal train at 12.26 a.m. The former must have stopped in section at 12.10 a.m. and the collision have occurred 17 min. later.

The passenger train driver said the brake went on as he passed the junction box at about 60 m.p.h. He assumed the chain had been pulled, shut the regulator and allowed the train to be stopped after at first trying unsuccessfully to overcome the fall in vacuum by the large ejector. He and his fireman practically agreed on what were their subsequent actions. The latter got down "within a few seconds" and went to meet the guard, but appears to have spent some time on the way looking for a turned indicating disc. The driver remained on the engine until he saw the men meet, with hand lamps, when he got down, leaving the small ejector on. He took detonators, met the fireman and told him to go back to protect, but the latter said the guard was doing that and neither could find a turned disc or other source of leakage. The up main distant was seen to be "off" at this time.

The two men walked to the rear, returned and found a turned disc on the third coach. The driver reset it and the brake shoes were heard to drop. The driver got into the train, but could not find who had operated the chain. Just as he got down two detonators were heard, separated by 5 to 10 sec., and the collision followed immediately after. The driver went to Winsford Station box and the signalman at first seemed unable to grasp what had happened.

The guard, a man of 63, was much affected by his experience and his account was confused. When the train stopped he saw the fireman coming back. He went first to see if the vacuum hose in rear was on its plug, then went forward examining others. He said he climbed the coaches to inspect the discs, but he was not seen to leave the ground by the fireman. He suggested that four min. had been lost when he met the fireman and considering it was time to protect, decided to do it himself, as the more experienced man, contrary to rule, went back to the van for detonators and started out. In about a minute, he stumbled and fell and his lamp went out. He relit it, put down a detonator, and after four min. heard the postal train coming. He put down another detonator, got back another 30 yd. showing his red light, when the train passed at about 60 m.p.h. The detonators were exploded and he continued to Winsford Junction, where he was informed that the train was running under clear signals.

The driver of the postal train said that he was running at 60 m.p.h. and saw the guard's red lamp just after passing bridge No. 21, shut the regulator and braked fully. He saw the tail lamp ahead after hearing the first detonator. He thought the collision took place at about 40 m.p.h. The fireman confirmed this and had noticed Winsford Station distants to be at caution.

Signalling of the Trains

All signalmen concerned had booked on at 10 p.m. and in the next two hr. 10 up and 8 down trains had been signalled at Winsford Junction and Station boxes, the last down being a goods arriving at the junction at 12.10 a.m.

The junction signalman, a man of 66, who had worked there for 33 years, had as train booker another signalman aged 60, since deceased, who came from a box that had become redundant. He sent "entering section" for the express at 12.9 a.m. and in about 5 min. telephoned to ask what had become of it. The reply was that the tail lamp had been missed, as the down goods was passing, but this did not sound convincing. He felt that the goods would have passed the station box earlier than that, but he was satisfied when "out of section" was received at 12.17 a.m. He knew the other signalman to be an experienced man and assumed he had only missed the tail lamp and therefore held the block until he himself received "out of section."

At 12.22 a.m. he offered the postal train, which was at once accepted, and cleared his signals. After the train passed at 12.26

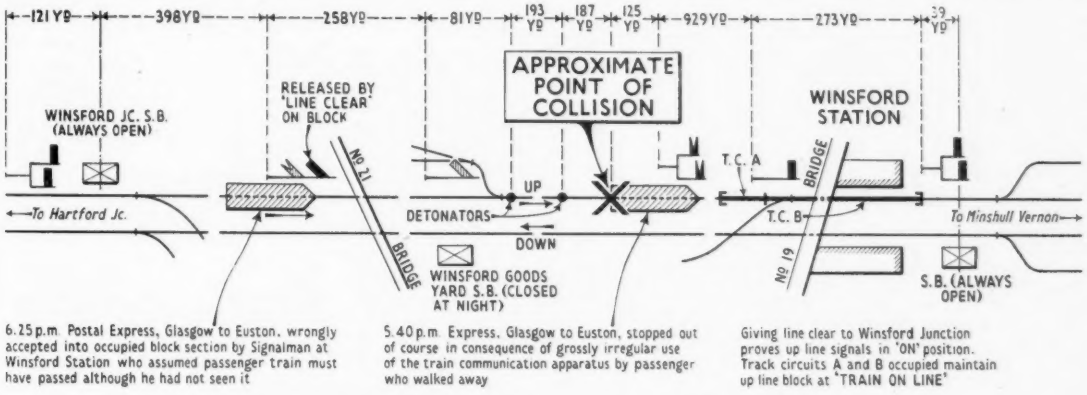

121 YD
398 YD
258 YD
81 YD
193 YD
187 YD
125 YD
929 YD
273 YD
39 YD
APPROXIMATE POINT OF COLLISION
RELEASED BY 'LINE CLEAR' ON BLOCK
WINSFORD JC. S.B. (ALWAYS OPEN)
WINSFORD STATION
No. 21
BRIDGE
T.C. A
UP
DETONATORS
DOWN
T.C. B
To Hartford Jc.
To Winshull Vernon
No. 19
BRIDGE
WINSFORD GOODS YARD S.B. (CLOSED AT NIGHT)
S.B. (ALWAYS OPEN)
6.25 p.m. Postal Express, Glasgow to Euston, wrongly accepted into occupied block section by Signalman at Winsford Station who assumed passenger train must have passed although he had not seen it
5.40 p.m. Express, Glasgow to Euston, stopped out of course in consequence of grossly irregular use of the train communication apparatus by passenger who walked away
Giving line clear to Winsford Junction proves up line signals in 'ON' position. Track circuits A and B occupied maintain up line block at 'TRAIN ON LINE'

Diagram illustrating circumstances of collision at Winsford on April 17, 1948

a.m., he heard "a dull thud" but thought nothing of it, not realising anything was wrong until the passenger guard arrived. He could make nothing of the man's confused account in Scottish dialect, but when the postal train guard arrived he was able to advise Control. This account was confirmed by the train booker.

Examination of the train registers showed that the passenger train had been recorded as passing Winsford Station, though it had never come in sight of the box, at 12.10 a.m., subsequently altered to 12.11, while the latter time for "train entering section received" appeared to have been entered at the box ahead, Minshull Vernon, after the collision.

The signalman at Winsford Station, 62 years old, had worked there for 21 years, 12 in the old box. The present box, on the down side, south of the station, is not so busy as the junction box; there is very little shunting there. The view towards the junction is obscured by No. 19 bridge, but track circuiting is provided to cover that. The headlights of the passenger train, when it stopped with the engine 90 to 100 yd. in advance of the up main distant signals, had nothing to obstruct the view of them along the straight length of track to the station, but they would not have been visible from the signal box.

The signalman said that he cleared his signals for that train at 12.17 a.m., on getting it accepted, and received "entering section" for it a minute later, but his account of his actions after that was confused and contradictory. He recognised that his entry of 12.11 as the passing time could have no substance in fact, nor could he deny having altered the figure from 12.10, but he had no recollection of doing that. He sent "entering section" forward early as the Control telephone was ringing and he was anxious to report the passage of the down Winsford goods and another previous down goods before starting a meal.

If he had waited to answer the telephone first, the express might have received a check at Minshull Vernon. He said he reported the two goods to Control and began warming his meal. The passenger train must have gone out of his mind until the inquiry came from the junction box, notwithstanding that the up line signal levers were still over. He confirmed having replied that the down goods had blocked the view, an impression that appears to have persisted in his mind. He continued to refer to it at the railway inquiry, but to Colonel Wilson he suggested that he thought the passenger train must have gone by, while he was telephoning with his back to the line. The Control staff was sure, however, that it had no communication with this box after midnight and had no record that the two goods trains were ever reported.

After dealing with a down express which passed at 12.16 a.m., he had a telephone conversation with Minshull Vernon box. The signalman there asked what had become of the passenger train, so he went to the foot of the box steps and looked both ways but could see no lights. He returned to the box, gave "out of section" and replaced his up signals. He told Minshull Vernon that, so far as he knew, the train was on its way to that box. His recollection was vague, however, and at one time he said he went down the steps when the inquiry came from the junction.

When the postal train was offered from there, he accepted it at once, and it appears that a little after that, some doubt arose in his mind about the true situation, though too late, as he did not offer the down postal train to the junction, but stopped it at his home signal at 12.40 a.m.

The signalman at Minshull Vernon, the next box towards Euston, a District Relief Signalman working there for the previous two weeks, said he received "entering section" at 12.11 a.m. The usual time for an express in the section was about 4 min., so after "6 or 7 min." he telephoned to Winsford Station to verify that the express had passed at that time. He asked whether it had been "doing all right" and was told it had (the Winsford Station signalman had no recollection of such a question). He went on the track, but could not see the train and, not being satisfied, stopped and cautioned the down postal train. He also referred to a second call he made to the station box, to the effect that the passenger train had still not arrived and thought this took place directly he returned from looking along the track. He could not say what reply he received and the other signalman remembered nothing of such second message. He assumed the train to be all the time in the section in rear of him and had no suspicion of any irregularity in the section in rear of Winsford Station.

After the accident he heard from that box that a fireman had come there saying someone had pulled the communication chain, but nothing was said about a collision. He heard this mentioned by someone else on the omnibus telephone circuit, and they heard of it from Winsford Station, but had no discussion with signalmen there about the cause. He denied that there had been any collaboration in the matter of altering train register bookings.

Thus, in spite of reminders from the box in rear and the box in advance, the Winsford Station signalman continued to assume that the passenger train had passed him, and his statements represented an attempt to account for this erroneous assumption, which led him to accept the postal train, but at no time did he attempt to deny his responsibility for the accident. He expressed deep regret, saying finally that he must have "forgotten all about" the passenger train for some reason he could not explain.

He was spoken well of by other men and by his stationmaster; the last-named was very surprised at his failure. A teetotaler and moderate smoker, he denied any suggestion that he was feeling sleepy, but mentioned that he was feeling the after-effects of a bad cold, though he did not consider himself unfit for duty. He also referred to some domestic anxiety. A thorough medical examination disclosed nothing to suggest he was not fit for his responsibilities.

Inspecting Officer's Conclusions

The standing train should have been protected by the block and the acceptance of the postal train involved a grave breach of the Regulations by the Winsford Station signalman. Responsibility for the collision rests with him.

There can be no suggestion that he was over-pressed by traffic. Colonel Wilson does not overlook the possible effects of the cold, or domestic anxieties, but the man was thoroughly experienced as a signalman and safe working in the emergency required nothing more than ordinary attention to his task. With such attention, no reminders should have been necessary and it was to be expected that he could have initiated a call to the box in rear when the passenger train did not appear.

Apart from the general unreliability of his evidence, his suggestion that he was baulked by the down goods train, or a telephone conversation, clearly had no foundation in fact, and Colonel Wilson finds it difficult to avoid the conclusion that he allowed himself to be distracted by the preparation of his meal about the time the train was due to pass, which led him to transmit "entering section" after the usual two min. interval.

The premature transmission of this signal, recorded under "train passed," in accordance with recognised local practice, appears to have been the beginning of his breakdown, and the circumstances cannot help suggesting that despite his statements to the contrary, he had fallen into the habit of attending to block signals as a mere matter of routine, depending on every train passing normally without hitch. He was thus caught unawares by the stoppage of the passenger train before it reached him.

A state of mind in which he was paying so little regard to the integrity of his block working may also explain his subsequent confusion and lack of honesty with himself, illustrated by his readiness to assume, in spite of reminders from colleagues, that the train had passed and that for some reason he had neglected to clear the block. His failure after many years of satisfactory service is much to be regretted. His record, apart from one serious block working irregularity 5 years ago, is consistent with the favourable opinions expressed by his superiors.

The other two signalmen concerned acted correctly and no criticism is to be directed against them.

The question arises, however, whether rear protection in accordance with Rule 179 (*a*) could have been afforded at an appreciably greater distance than it was, considering that the train had been standing 17 min.

Rule 181 (*f*) covering a train stopped by the use of the communication apparatus, is carefully drawn to ensure that the two important emergency duties of train protection and attention to the cause of stoppage are clearly allocated to different persons.

It was the fireman's sole duty to meet the guard and then lose no time in getting back, as the driver seems to have appreciated, but it seemed that he lost valuable time searching for a turned disc, really the guard's responsibility, and the latter decided to go back, contrary to rule, after he also had spent an appreciable time in looking for the cause of the stop. Colonel Wilson does not question that both men were trying to do their best and were handicapped by the absence of the soldier who pulled the chain, but emphasises that time may pass with deceptive rapidity on such occasions. If each man had concentrated on his own task it seems probable that the fireman would have had time to get considerably further back than the guard did and perhaps to Winsford Junction.

Colonel Wilson is satisfied that the driver of the postal train was alert. With right-hand curvature it is doubtful whether he could have seen the guard's red light any earlier. He braked promptly and may have been travelling faster than his estimate of 50 to 60 m.p.h.

The driver of the passenger train stated that he had been unable to keep the brakes off with the large ejector. The equipment was in order and had he persisted he should have had no difficulty in keeping the train in motion. Careful trials with a

similar train proved this. Nevertheless, the driver conformed to rule in allowing the train to come to a stand where it did.

Remarks and Recommendations

Class "C" block has been installed for practically the whole length of the two London Midland routes from Euston and St. Pancras to Carlisle, and a programme is continuing for its extension on other important lines. Other Regions are also extending the application of similar controls, though there are variations in detail and in the application of their programmes. Much has therefore been done, and is being done, to prevent the more likely errors to which signalmen may be liable, but such controls do not afford a safeguard against irregular clearance of the block if a train has not reached the track circuit in rear of the outermost stop signal of a box. Due to the conscientious observance of block discipline by the great majority of signalmen, such cases are rare, but especially on routes where traffic is fast and frequent it is clearly desirable to assist them by the application of such preventive controls as may be practicable.

Continuous track circuiting, which alone can afford complete protection, can only be justified on routes of exceptional traffic density, but the former L.N.E.R. already is equipped fairly extensively with its special Welwyn block control, introduced after the collision at Welwyn Garden City in 1935. Once a train has been accepted, the berth track circuit has to be occupied and cleared before "line clear" again can be given to release the starting signal of the box in rear. A similar safeguard is afforded by the rotary block of the former Midland Railway, now combined with Class "C" controls on the St. Pancras-Carlisle and other routes of the London Midland Region. The circumstances again have drawn attention to the desirability of such additional protection and the Railway Executive is considering the standardisation of the Welwyn type of control.

Colonel Wilson has no recommendation on the matter of preventive equipment generally, but mentions that a block control of the Welwyn type has to be specially released in the event either of the cancellation of a train which has been offered and accepted, or of a safety side failure of the berth track circuit. In the normal arrangement such release can be effected by the signalman in advance without co-operation with the box in rear, but its action has been made deliberate by the provision of a screw-operated switch which requires at least two min. to move it into the releasing position.

Even a deliberate release has its risks in the hands of a man in the Winsford signalman's state of confusion unless there is some independent check, provided with the Welwyn control in special cases; for instance, long tunnel sections, where the release requires the co-operation of the signalmen at both ends of the section. Consideration should be given to the general standardisation of this co-operative feature, which may be a valuable safeguard if a signalman is mistakenly convinced that a train has passed through the section and assumes failure of the track-circuit to release. If the Welwyn control had been installed at Winsford Station, with a co-operative, as opposed to an independent release, there is little doubt that this accident would not have occurred.

The specific recording of the times at which "out of section" and "entering section" are given, is not strictly enforced in all signal boxes of the London Midland Region, though there are columns so headed in the standard London Midland & Scottish register books; this is a continuance of old practice.

While it is impossible to say whether the recording of "entering section" to Minshull Vernon in the "train passed" column had any bearing on the signalman's failure, the recording of all block signals is desirable, and instructions are being issued that the times at which "out of section" and "entering section" are given as well as received should be specially recorded in all signal boxes of the London Midland Region where registers are kept. This is the practice in other Regions, and Colonel Wilson recommends that it should be maintained when a train register book is standardised for British Railways.

Representations were made by other signalmen at Winsford Station that the work of the box justified the provision of a booking lad. The circumstances, however, do not suggest in any way that the signalman's failure might have been due to confusion arising from pressure of traffic or telephone calls.

The fact that the usual emergency arrangements for protection by detonators and a red hand-signal failed to prevent the collision, again suggested the possible use of flares, or other devices, for giving warning of an obstruction, not as a substitute for detonators placed at the appropriate distance from it, but to supplement them if needed, for instance, when a train approaches before the regulation ¼ mile has been covered. Exhaustive trials with flares were carried out by the railway companies after the accident at Dinwoodie in 1928, but their introduction was not considered to be justified at the time. The question again received prominence after the accident at Browney on the former L.N.E.R. in January, 1946, with special relation to obstruction of the opposing line where no protection is afforded by the block; further trials were carried out in 1947, and again this year, with the co-operation of the Ministry of Supply, to ascertain whether recent developments in pyrotechnic equipment should modify the former adverse decision, and the matter is still under consideration.

The "Bundoran Express" G.N.R.(I.)

Popular summer service caters for heavy holiday traffic from both Dublin and Belfast

During the summer season every year, traffic for Pettigo and Bundoran is on such a scale that the Great Northern Railway (Ireland) makes special arrangements to facilitate passengers travelling from the Dublin and Belfast directions to Pettigo for the Lough Derg Pilgrimage and to Bundoran. Ordinarily, passengers are required to change *en route*, but with the introduction of the "Bundoran Express," a through service is established.

The "Bundoran Express" operated during June, July, and August last, one part leaving Dublin at 8.45 a.m. and the other Belfast at 9.0 a.m., and linking up at Clones (Eire), whence a non-stop run was made to Pettigo (Eire). In this period alone, about 12,000 passengers from Dublin, Drogheda, and Dundalk availed themselves of the special facilities provided. The Dublin-Bundoran express also gives a connection from Ballyshannon for passengers travelling to holiday resorts in County Donegal generally.

The train crosses and re-crosses the border between Northern Ireland and Eire at several points on the journey, and for this reason special Customs requirements must be strictly observed, especially in connection with luggage accompanying passengers. This is accommodated in through vans, sealed *en route*, so minimising inconvenience to the owners. The through running between Clones and Pettigo completely avoids customs examination for most passengers.

Two sets of coaches operate on the Dublin-Bundoran run, including a dining car, which, on the outward journey from Dublin is detached at Clones and there transferred to the Bundoran-Dublin express making the return trip. Passengers are therefore assured of a meal between Dublin and Clones in each direction.

Most of the traffic for Lough Derg (Pettigo), Bundoran, and so on, originates at stations on the southern section of the system, and as a rule the 8.45 a.m. "Bundoran Express" from Dublin is required to be made up to maximum carrying capacity. Except at peak periods it is found seldom necessary to increase the loading of the through Bundoran portion of the 9.0 a.m. express from Belfast.

Dublin portion of Bundoran express leaving Amiens Street, Dublin, Great Northern Railway (Ireland)

British Transport Commission Statistics

Summary of the principal statistics for the four-week period ended September 5

The British Transport Commission is bringing the series of four-weekly *Transport Statistics* rapidly up to date and No. 9 for the period to September 5* is summarised in the usual set of tables. The British Railways' figures continue to show the disquieting trends which have been evident since March. The railways are not keeping their grip on either passenger, or merchandise traffic. In August, passenger journeys originating were fewer by 10 per cent., the decline being most marked in the Western Region (16 per cent.) and in the North Eastern (20 per cent.). Passenger receipts for all Regions were only 2·5 per cent. higher.

* British Transport Commission Statistics, 1948. Series No. 9. Period to September 5. London: British Transport Commission. Price 1s.

An increase of 8·6 per cent. in the tonnage of coal and coke was poor compensation for the loss of 281,000 tons of merchandise, which brought the total carryings of merchandise for the first 36 weeks of this year below the 1947 figure. The loss of high-rated goods is especially serious in the Western and Eastern Regions. In the September period, merchandise receipts were only 5 per cent. higher, whereas dues from coal and coke advanced by 18 per cent. An improvement of 1·4 per cent. in net ton miles was caused by the larger volume of minerals and coal.

More train miles were worked, particularly in the London Midland Region, and freight train speed was slightly better at 8·58 m.p.h., in spite of a falling off in the Scottish Region, probably brought about by the temporary closing of the line between Berwick and Dunbar through the August floods. That disaster also may account for the rise in coal consumption across the Border to 71 lb. per engine mile.

The rolling stock position was stronger on the whole, though 12 per cent. of the total operating stock of wagons was under repairs.

London Transport had another busy period, carrying 22,749,000 more passengers, an increase of nearly 7 per cent., and taking £27,000 more in fares, at an average of 2¼d. per journey.

The Commission's staff increased by 804 in the period. The figure for British Rail-

(*Continued on page* 591)

STAFF

—	Commission's head office	British Railways	London Transport	Hotels & Catering	Steamships Marine & Docks	Inland Waterways	Railway Clearing House	Total
Administrative ...	134	80,123	4,857	1,873	2,202	691	618	90,498
Operating ...	—	352,085	61,096	—	15,814	2,246	—	431,241
Maintenance & construction ...	—	213,089	31,105	—	7,150	2,513	—	253,857
Others	12	13,398	3,934	14,927	170	—	352	32,793
Total ...	146	658,695	100,992	16,800	25,336	5,450	970	808,389

1. BRITISH TRANSPORT COMMISSION TRAFFIC RECEIPTS

—	Four weeks to September 5		Inc. or dec.	Aggregate to September 5		Inc. or dec.
	1948	1947		1948	1947	
	£000	£000	£000	£000	£000	£000
British Railways—						
Passengers	11,748	11,460	+ 288	89,136	82,404	+ 6,732
Parcels, etc., by passenger train... ...	2,309	2,065	+ 244	20,158	17,680	+ 2,478
Merchandise	6,011	5,724	+ 287	57,397	48,264	+ 9,133
Minerals	2,150	1,719	+ 431	19,559	13,920	+ 5,639
Coal & coke	4,949	4,167	+ 782	45,179	36,535	+ 8,644
Livestock	115	79	+ 36	624	583	+ 41
	27,282	25,214	+ 2,068	232,053	199,386	+ 32,667
Steamships	1,282	1,203	+ 79	6,874	6,217	+ 657
Inland Waterways	140	126	+ 14	1,145	1,009	+ 136
Hotels & Catering	1,110	1,057	+ 53	9,191	8,525	+ 666
London Transport—						
Railways	1,098	996	+ 102	10,060	9,068	+ 992
Buses & coaches	2,566	2,369	+ 197	21,893	19,663	+ 2,230
Trams & trolleybuses	894	841	+ 53	7,775	7,138	+ 637
	4,558	4,206	+ 352	39,728	35,869	+ 3,859
Total	34,372	31,806	+ 2,566	288,991	251,006	+ 37,985

2. BRITISH RAILWAYS

(A) Passenger Journeys Originating

—	Region						Total
	London Midland	Western	Southern	Eastern	North Eastern	Scottish	
	+ or − over 1947 Per cent.	+ or − over 1947 Per cent.	+ or − over 1947 Per cent.	+ or − over 1947 Per cent.	+ or − over 1947 Per cent.	+ or − over 1947 Per cent.	+ or − over 1947 Per cent.
Ordinary fares	1,714,000 (−21·47)	891,000 (−10·39)	2,531,000 (−10·12)	1,033,000 (−5·94)	248,000 (−26·68)	458,000 (−28·59)	6,875,000 (−14·82)
Monthly return	7,970,000 (−34·54)	2,553,000 (−48·56)	8,703,000 (−27·00)	2,742,000 (−36·10)	772,000 (−64·81)	1,287,000 (−43·61)	24,027,000 (−36·49)
Excursion, weekend, cheap day, etc.	3,975,000 (+181·38)	2,394,000 (+185·88)	3,420,000 (+228·94)	1,454,000 (+262·06)	1,299,000 (+113·30)	822,000 (+270·34)	13,364,000 (+195·51)
Workmen	6,788,000 (+1·96)	1,543,000 (−6·10)	5,877,000 (+4·69)	1,740,000 (−6·51)	870,000 (−7·53)	853,000 (−7·12)	17,671,000 (+0·20)
Other descriptions ...	1,500,000 (−21·65)	974,000 (−27·10)	1,671,000 (−20·33)	770,000 (−21·49)	436,000 (−26·08)	472,000 (−20·85)	5,823,000 (−22·51)
Season tickets	5,140,000 (−17·00)	1,680,000 (−24·64)	9,719,000 (−3·10)	1,853,000 (−14·25)	643,000 (−5·22)	3,556,000 (−9·39)	22,591,000 (−10·41)
Total	27,087,000 (−11·29)	10,035,000 (−16·40)	31,921,000 (−4·77)	9,592,000 (−11·13)	4,268,000 (−20·24)	7,448,000 (−13·25)	90,351,000 (−10·36)

(B) Freight Tonnage Originating

—	Region						Total
	London Midland	Western	Southern	Eastern	North Eastern	Scottish	
	+ or − over 1947 Per cent.	+ or − over 1947 Per cent.	+ or − over 1947 Per cent.	+ or − over 1947 Per cent.	+ or − over 1947 Per cent.	+ or − over 1947 Per cent.	+ or − over 1947 Per cent.
Merchandise	1,288,000 (−2·46)	743,000 (−11·58)	313,000 (+1·39)	538,000 (−14·13)	513,000 (−2·75)	588,000 (−8·20)	3,983,000 (−6·59)
Minerals	1,520,000 (−3·61)	613,000 (+8·96)	111,000 (−10·46)	664,000 (−0·67)	807,000 (+2·88)	608,000 (+6·82)	4,323,000 (+0·87)
Coal & coke	4,312,000 (+9·91)	1,665,000 (+0·90)	242,000 (−0·43)	1,966,000 (+15·57)	2,396,000 (+10·97)	1,631,000 (+4·14)	12,212,000 (+8·62)
Livestock	20,000 (−12·99)	10,000 (−22·75)	3,000 (+9·21)	4,000 (−16·33)	8,000 (+59·18)	36,000 (−8·13)	81,000 (−7·69)
Total	7,140,000 (+4·33)	3,031,000 (−1·14)	669,000 (−1·39)	3,172,000 (+5·69)	3,724,000 (+7·13)	2,863,000 (+1·71)	20,599,000 (+3·61)

(C) Net Ton Miles

—	Region						Total
	London Midland	Western	Southern	Eastern	North Eastern	Scottish	
	+ or − over 1947 Per cent.	+ or − over 1947 Per cent.	+ or − over 1947 Per cent.	+ or − over 1947 Per cent.	+ or − over 1947 Per cent.	+ or − over 1947 Per cent.	+ or − over 1947 Per cent.
Merchandise & livestock ...	186,103,000 (+5·40)	96,814,000 (−11·58)	28,155,000 (+6·64)	75,255,000 (−7·91)	41,209,000 (−11·83)	81,195,000 (−3·62)	508,731,000 (−3·13)
Minerals	122,073,000 (−2·39)	68,075,000 (+15·59)	14,561,000 (−9·86)	83,858,000 (−0·96)	30,351,000 (+8·27)	37,591,000 (+4·71)	356,509,000 (+2·24)
Coal & Coke	282,876,000 (+8·36)	112,063,000 (−11·12)	24,895,000 (−6·43)	172,060,000 (+15·82)	68,835,000 (+7·67)	63,227,000 (−5·98)	723,956,000 (+4·40)
Total, all classes of traffic ...	591,052,000 (+5·04)	276,952,000 (−5·95)	67,611,000 (−2·24)	331,173,000 (+5·15)	140,395,000 (+1·22)	182,013,000 (−2·87)	1,589,196 (+1·39)

(D) Train Miles

—	Region						Total
	London Midland	Western	Southern	Eastern	North Eastern	Scottish	
	+ or − over 1947 Per cent.	+ or − over 1947 Per cent.	+ or over 1947 Per cent.	+ or − over 1947 Per cent.	+ or − over 1947 Per cent.	+ or − over 1947 Per cent	+ or − over 1947 Per cent.
Coaching train miles—							
Steam—							
Loaded	4,453,000 (+9·70)	2,961,000 (+6·03)	1,587,000 (+7·19)	2,655,000 (+8·16)	1,066,000 (+13·25)	1,869,000 (+5·30)	14,591,000 (+8·05)
Empty	154,000 (+15·92)	149,000 (+6·66)	69,000 (+12·08)	104,000 (+22·08)	51,000 (+23·90)	75,000 (+7·86)	602,000 (+13·56)
Total loaded & empty ...	4,607,000 (+9·90)	3,110,000 (+6·06)	1,656,000 (+7·39)	2,759,000 (+8·63)	1,117,000 (+13·69)	1,944,000 (+5·40)	15,193,000 (+8·26)
Electric—							
Loaded	445,000 (+10·01)	—	2,747,000 (+3·92)	21,000 (−61·49)	91,000 (−2·31)	—	3,304,000 (+3·41)
Empty	20,000 (−2·51)	—	71,000 (+1·98)	2,000 (−16·21)	10,000 (+7·30)	—	103,000 (+1·22)
Total loaded & empty ...	465,000 (+9·41)	—	2,818,000 (+3·87)	23,000 (−59·81)	101,000 (−1·39)	—	3,407,000 (+3·34)
Freight train miles—							
Loaded	3,003,000 (+1·79)	1,549,000 (+0·64)	529,000 (−4·09)	1,648,000 (+2·82)	848,000 (−2·86)	1,375,000 (−4·90)	8,952,000 (−0·12)
Empty	536,000 (+13·96)	186,000 (+6·22)	11,000 (+15·97)	331,000 (+7·96)	208,000 (+10·96)	203,000 (+8·19)	1,475,000 (+10·06)
Total loaded & empty ...	3,539,000 (+3·47)	1,735,000 (+1·21)	540,000 (+4·37)	1,979,000 (+3·65)	1,056,000 (−0·42)	1,578,000 (−3·40)	10,427,000 (+1·21)
Total coaching and freight train miles—							
Loaded	7,901,000 (+6·55)	4,501,000 (+4·14)	4,863,000 (+4·02)	4,324,000 (+5·13)	2,005,000 (+9·97)	3,244,000 (+0·71)	26,847,000 (+4·22)
Empty	710,000 (+13·96)	335,000 (+6·34)	151,000 (+4·13)	437,000 (+11·14)	269,000 (+13·02)	278,000 (+8·17)	2,180,000 (+10·55)
Total loaded & empty ...	8,611,000 (+7·13)	4,845,000 (+4·27)	5,014,000 (+4·03)	4,761,000 (+5·66)	2,274,000 (+5·99)	3,522,000 (+1·26)	29,027,000 (+5·04)

(E) Freight Train Miles per Train Hour

Region												Total	
North Midland		Western		Southern		Eastern		North Eastern		Scottish			
1948	1947	1948	1947	1948	1947	1948	1947	1948	1947	1948	1947	1948	1947
7·52	7·24	9·65	8·92	8·75	8·87	8·28	7·86	10·21	9·76	9·79	10·09	8·58	8·30

(F) Locomotive Coal Consumption

—	Region												Total	
	London Midland		Western		Southern		Eastern		North Eastern		Scottish			
	Tons	+ or − over 1947 Per cent.	Tons	+ or − over 1947 Per cent.	Tons	+ or − over 1947 Per cent.	Tons	+ or − over 1947 Per cent.	Tons	+ or − over 1947 Per cent.	Tons	+ or − over 1947 Per cent.	Tons	+ or − over 1947 Per cent.
Tonnage consumed ...	348,000	(+6·28)	164,000	(+11·87)	77,000	(+3·00)	200,000	(+4·83)	89,000	(+3·04)	171,000	(+6·25)	1,049,000	(+6·29)
Lb. per engine mile ...	63·31	(+2·10)	50·82	(+8·24)	54·11	(+3·76)	64·06	(+0·17)	61·72	(−0·32)	71·09	(+5·99)	61·29	(+3·18)

(G) Rolling Stock Position

	Operating stock	Number under repair	Serviceable stock	Serviceable stock in 1947
Locomotives ...	19,805	3,749	16,056	15,876
Coaching vehicles	55,270	6,315	48,955	47,814
Freight wagons ...	1,185,483	147,381	1,038,102	1,030,288

ways is less, because 4,162 people are now included under "Steamships, Marine & Docks" due to the transfer of South Wales docks to the Dock Executive. The Railway Executive actually made 176 new appointments to the staff remaining under its control.

4. LONDON TRANSPORT

(A) Passenger Journeys Originating

	Number	+ or − over 1947 per cent.
Railways	47,143,000	(+8·19)
Buses & coaches	211,731,000	(+7·70)
Trams & trolleybuses ...	92,627,000	(+4·56)
Total	351,501,000	(+6·92)

(B) Rail and Road Car Miles

	Miles	+ or − over 1947 per cent.
Railways	17,801,000	(+8·87)
Buses & coaches	24,310,000	(+6·10)
Trams & trolleybuses ...	8,760,000	(+3·39)
Total	50,871,000	(+6·57)

(C) Rolling Stock Position

	Operating stock	Number under repair	Serviceable stock	Serviceable stock in 1947
Railway vehicles	3,948	366	3,525	3,347
Buses & coaches	7,441	1,095	6,346	5,696
Trams & trolleybuses	2,637	293	2,344	2,294

3. INLAND WATERWAYS

Tonnage of traffic and ton-miles

	Tonnage	+ or − per cent.	Ton-miles	+ or − per cent.
General merchandise	303,000	(−10·85)	5,658	(−0·47)
Liquids in bulk ...	122,000	(+4·07)	2,992	(+14·64)
Coal, coke, patent fuel & peat ...	430,000	(+18·78)	6,543	(+24·82)
Total	855,000	(+4·39)	15,193	(+12·24)

Retired Railway Officers' Society

The autumn luncheon of the Retired Railway Officers' Society was held at the Criterion Restaurant, London, W.1, on Tuesday, November 16, under the chairmanship of the President, Mr. Ernest Wharton. The principal guests were Sir Montague Eddy, and Sir Herbert Williams.

Among those present were:

Guests

Sir Montague Eddy, Sir Herbert Williams, Messrs. C. K. Bird (Chief Regional Officer, Eastern Region), G. L. Darbyshire (Chief Regional Officer, L.M. Region), J. Elliot (Chief Regional Officer, Southern Region), D. R. Lamb (President, Institute of Transport), H. Rudgard (President, Institution of Locomotive Engineers), J. A. Kay (Editor *The Railway Gazette*), P. Wharton.

Messrs. B. G. Baker, D. Blee, G. Bouguet, W. P. Bradbury, J. Briggs, L. C. Brittlebank, R. Burgoyne, J. Campbell, A. L. Castleman, C. Coe, S. O. Cotton, F. Crews, A. Dean, C. R. Dashwood, Lt.-Colonel Davies.

Mr. J. W. Enser, Lt.-Colonel C. N. Ford, Messrs. C. Furber, F. Gilbert, F. Grundy R. G. Herbert, H Holcroft, E. S Hunt, A. P Hunter, T. W. Jacobs, A. Jones, W. P. Keith, L. S. Kettle, J. M. Kirkwood, C. F. Klapper, H. Leighton.

Messrs. D. Murray, H. Mack, W. S. Messer, P. Nunn, A. W. Norman, W. G. Pape, R. Paterson, R. E. Pike, A. Priestley, D. Ramsey, H. G. N. Read, J. L. Rendall, R. M. T. Richards, G. Rider, V. A. M. Robertson, G. H. Searle, S. W. Smart, R. S. M. Stapleton, H. H. Starr, F. W. Tipton.

Members

Messrs. A. W. Arthurton, H. Barnden, G. B. Barton, H. I. Bond, J. F. Bradford, F. S. Bridge, H. Burcham, R. Carpmael, S. B. Carter, E. A. Clear, F. E. Cox (Honorary Secretary), G. Cornish, R. G. Davidson, W. J. England, E. Falconer.

Messrs. E. D. Grasett, A. J. Grinling, H. J. Guest, E. B. Hassall, E. L. Hawkins, C. V. Hill, H. J. Hoskins, C. Johnstone, A. E. Kirkus, J. H. Laundy, J. W. Lovejoy (Honorary Treasurer), J. Murray, A. Maynard, D. McCulloch, A. H. McMurdo, C. N. Mansfield, W. A. Messer, E. W. Mauger, H. V. Mosley, A. S. Mills.

Messrs. F. J. Paice, E. E. Painter, W. M. Perts, W. H. Pyne, H. E. Robarts, P. G. Robinson, W. J. Sawkins, J. G. Symes, G. S. Szlumper, W. E. Thornhill, H. A. Vallance, W. T. Venton, G. J. Walker, H. B. Webster, E. Wharton (President), H. E. O. Wheeler, J. H. Woodhead.

Mr. Ernest Wharton, in proposing the toast of the guests, gave the old North-Country greeting, "Come forward, you are welcome." The principal guests needed no formal introduction. Sir Herbert Williams was a very old friend of the Society, who was distinguished both as a politician and an industrialist. The members of the Society were glad to learn that he had suffered no ill effects from his recent motoring accident, and that Lady Williams was making a good recovery. The President welcomed Sir Montague Eddy as one of his oldest colleagues on the former London & North Western Railway, and recalled humorous incidents at the conferences held at Euston in their early days. The important work that Sir Montague had done in recent years in connection with Argentina and railways was well known; and his efforts on behalf of the Red Cross, during the recent war, deserved the highest praise. The Society also welcomed Lt.-Col. H. Rudgard, Chief Officer (Motive Power), Railway Executive, Mr. David Lamb, President of the Institute of Transport, Mr. John Kay, Editor of *The Railway Gazette*, and many others who had risen to positions of eminence in the transport world.

Sir Herbert Williams and Sir Montague Eddy responded jointly to this toast. Sir Herbert Williams, in expressing thanks for the hospitality extended to the guests, likened the members of the Society to the Andes, which comprised many volcanoes, some in eruption, and others extinct. He referred to the changes in our national economy in recent years, and looked forward to the restoration of the law of supply and demand, which, he thought, would yield better results than the present system of planned economy.

Sir Montague Eddy expressed the great pleasure that it gave him to be present. He recalled the conferences at Euston, to which the President had referred. In those days he could not understand why the senior officers, who had reached the age of 60, did not retire; now that he had attained that age, he understood the reason fully. The railways were now passing through a difficult period, and he suggested that a board composed of retired Officers could assist those still in office in solving some of their difficult problems.

Mr. David Lamb proposed the toast, "Success to the Retired Railway Officers' Society," and said that it gave him particular pleasure to be among so many old friends. He recalled his own early days on the railway, when he regarded the senior officers with something like awe. The Society enabled these "giants" of former years to meet, and talk over their past experiences. They were in the happy position of being able to relax, and forget the cares of the world.

Major-General G. S. Szlumper responded, and thanked Mr. Lamb for his complimentary remarks. The Society numbered railway officers of all ranks among its members, and perpetuated the spirit of good-fellowship that characterises the railwayman the world over. In paying tribute to the work of the present officers, he emphasised that those who had retired did not envy them their task in these difficult times.

Mr. John Elliot, Chief Regional Officer, Southern Region, in a brief speech, assured Major-General Szlumper that the present generation of railway officers derived personal satisfaction and pleasure in the performance of their duties.

The toast of the President was proposed by Mr. R. G. Davidson, who expressed the gratification of the members that Mr. Wharton had recovered from his recent illness, and was now enjoying his second year as President of the Society.

The President read messages of regret for inability to attend the luncheon from General Sir William Slim, Sir Sam Fay, Sir Felix Pole, and Mr. W. H. Hyde. Mr. Wharton added that he had enjoyed his terms of office as President, but emphasised that this was the last luncheon at which he would preside. On the other hand, he looked forward to attending many more gatherings as a private member of the Society.

DISPLAY OF STAINLESS STEEL COACHES.—The Chesapeake & Ohio held a display in October of 46 new stainless steel coaches, built by the Budd Company, which have now gone into regular service. The coaches include no-extra fare "family coaches," tavern lounge cars, and vista-dome cars. A train made up of the different types of cars began a two-week exhibition tour, beginning at New York, and including Philadelphia, Baltimore, Washington and cities along the Chesapeake district of the C. & O., from Charlottesville to Cincinnati.

Parliamentary Notes

Nationalised Railways and Efficiency

Lord Monkswell, in the course of the debate in the House of Lords on November 3, on a motion by the Earl of Selkirk on the organisation of nationalised industries, spoke on the subject of the railways. He said that during the discussions in Parliament on the Transport Bill hardly anything had been said on the subject of railway efficiency or the effect on it of nationalisation. The only real justification for nationalisation would be if it increased efficiency, and he hoped that would be given priority.

Referring to the progress of railways since 1825, Lord Monkswell said that for 25 years progress had been rapid, after which it had been extremely slow for something like 80 years, when the most important improvements had been the adoption of continuous brakes and block signalling, which had been forced on the railways by the Board of Trade. Then, from approximately 1930, one radical improvement after another had been introduced. Express goods trains had been multiplied; the use of containers and the system of railhead distribution developed; passenger services greatly improved; and third class sleeping cars introduced. Much progress had been made in the design of the steam locomotive and construction and maintenance of the permanent way; and line capacity had been greatly increased by almost a revolution in signalling.

He emphasised that the really important improvements which had been carried out during the long period of semi-inertia had been due to the existence of an overriding authority, the Board of Trade, which could put pressure on the railway managers. In the present set-up there would be no overriding authority. The railways would be controlled absolutely by the Minister of Transport and his advisers. Public opinion was a broken reed, and Parliament was equally impotent, because, to exercise real control, expert knowledge was required. The temptation to go slow when there was no overriding authority to prevent it was tremendous, particularly when the whole nation could be compelled to subsidise inefficiency. Anyhow, they would not be able to attribute their troubles to road competition, and they would be free to make the best they could of increased road-rail co-ordination.

He believed too much importance was attributed to the effect of road competition. The railways, with Government approval, had always so arranged their charges that persons despatching valuable goods of small weight and bulk had been forced to subsidise those despatching cheap, bulky goods. The valuable goods were precisely those suited for carriage by road, while most of the cheap goods must travel by rail. If we lived in a sensible world, the obvious thing would be to allow each class of goods to travel by the means for which it was best suited, and the charge what the transport cost, together with a reasonable profit. But the cancer of subsidies had such a stranglehold on transport, and the abandonment of subsidies would be such a shock to the national economy, that it was considered necessary to maintain them, cost what it might. Even so, he was unconvinced that the loss of profitable traffic to the roads would be anything like sufficient, of itself alone, to cause serious trouble to the railways.

Lord Monkswell said he earnestly hoped that no electrification of surface lines would be undertaken without making quite sure that it would be financially justifiable.

The one really important consideration, whether electrification saved money in comparison with a similar, or almost similar, service carried on by the best type of steam locomotive, was wrapped in mystery. It was impossible to get the relative figures. Another matter to be approached with caution was standardisation. Perfection was far from having been reached in railway appliances, and standardisation might easily put obstacles in the way of improvements of many kinds. On the other hand, it might obviously produce great economies.

Viscount Swinton said Parliament and the public had a right to know how the nationalisation experiments were working.

Lord Lucas of Chilworth, replying for the Government, said it was very difficult to find a mean between where policy ended and executive management began. He admitted that it had not yet been found, but the matter was receiving constant and careful thought.

Questions in Parliament

British Railways Houses

Sir John Mellor (Sutton Coldfield—C.) on November 1 asked the Minister of Health whether he had considered the decision of the County Court Judge at Plymouth, on October 28, that rent-controlled houses, which previously had belonged to a railway company, became decontrolled on nationalisation; and whether he proposed to introduce legislation to restore control.

Mr. John Edwards (Parliamentary Secretary, Ministry of Health) in a written answer stated: The Minister of Health understands that this decision is to be the subject of an appeal.

Payment for Seat Reservations

Mr. E. H. Keeling (Twickenham—C.) on November 2 asked the Chancellor of the Exchequer whether he was aware that the British Railway Executive advertised that reserved seats in French and English trains could be paid for in sterling at its Paris office; and whether he had authorised that contravention of the regulation that sterling must not be spent abroad.

Sir Stafford Cripps (Chancellor of the Exchequer): The answer to both parts of the question is: No, Sir.

Mr. Keeling: Is the Chancellor going to prosecute British Railways for breaking the law for the last 10 months? Is he aware that I have in my hand the British Railways "Continental Handbook," which on one page says that sterling must not be spent abroad, yet on another invites people to spend sterling on reserving seats?

Sir Stafford Cripps: I think the mistake is in Mr. Keeling's reading of the document. It is setting out the price of reserved seats in sterling. Of course, it has to be paid in francs.

Mr. Keeling: Is the Chancellor of the Exchequer aware that British Railways themselves connived at a breach of the law by accepting 2s. from me for reserving a seat?

Sir Stafford Cripps: If Mr. Keeling will send me particulars of the crime, I will have it inquired into.

Train Lavatories

Dr. Somerville Hastings (Barking—Lab.) on November 4 asked the Minister of Health whether his attention had been called to the danger of the dissemination of typhoid fever, infantile paralysis and other diseases, as the result of the lavatories of main-line trains discharging directly on to the track; and what action he proposed to take.

Mr. Aneurin Bevan (Minister of Health) in a written answer stated: I am advised that there is hardly any evidence at present that disease is spread in this way; but my medical officers are keeping in close touch with current research in this field.

Turn-Round of Shipping

Mr. P. Morris (Swansea West—Lab.) on November 1 asked the Minister of Transport if he accepted the Report of the Working Party on the Turn-Round of Shipping in the United Kingdom Ports; and what steps were being taken to implement its recommendations.

Mr. Alfred Barnes, in a written answer, stated: Yes, sir. I have brought the recommendations to the notice of the interests concerned and have asked them to let me have reports of the progress made in carrying them out. Effect has already been given to many of the recommendations.

Toll Roads and Bridges

Mr. L. D. Gammans (Hornsey—C.) on November 1 asked the Minister of Transport how many toll gates were now owned by and operated on behalf of British Railways; and when he expected those tolls would be abolished.

Mr. Alfred Barnes, in a written answer, stated: Six toll bridges and two toll roads. I am discussing with the British Transport Commission the question of freeing from tolls the two bridges which are on trunk routes. As regards the remainder, the local authorities concerned have power to acquire the toll rights and, as I informed them in a circular dated March 19, 1947, I am prepared to consider applications for grants from the Road Fund towards the cost of freeing those on classified roads.

Foreign Travel

Mr. E. H. Keeling (Twickenham—C.) on November 2 asked the Chancellor of the Exchequer whether he would relax the regulation that sterling must not be spent abroad so as to permit travellers by the through Continental services from London *via* Ostend to Germany, Czechoslovakia, Denmark, Switzerland, Austria and Italy to buy meals and drinks in Belgian dining cars.

Sir Stafford Cripps: Incidental expenses on Belgian dining cars should be paid for in Belgian francs and not in sterling notes. If a traveller is proceeding by this route on a journey for which the provision of currency has been authorised, he may obtain, on application, Belgian francs as part of his allocation for this purpose.

Mr. Keeling: Is the Chancellor aware that there is no reference to this provision of Belgian francs in such cases in the regulations, which say that Belgian currency will not be given?

Sir Stafford Cripps: I think that is a mistake. In a case where travel takes place through Belgium and it is necessary to buy a meal or other things in Belgium, arrangements can be provided for that.

Mr. Keeling: The regulation does not say so.

Foreign Bondholders

Mr. E. H. Keeling (Twickenham—C.) on November 2 asked the Chancellor of the Exchequer whether he was aware that, although it was now three months since the Italian Government had agreed to pay arrears of interest under its guarantee of the Austrian Conversion Loan 1934-59, no payment had yet been made; and whether he could make any announcement.

Sir Stafford Cripps, in a written answer, stated: The Council of Foreign Bondholders has issued notices concerning the consortium bonds and the bonds of the Maremmana Railway and the Royal Sardinian Railway. The Italian Government has made to the bondholders the offers which it undertook to make in respect of the consortium bonds and the drawn bonds of the Maremmana Railway. It has not yet made offers carrying out its undertakings in respect of the Royal Sardinian Railway bonds or the arrears of interest on the undrawn bonds of the Maremmana Railway. As regards the Austrian Loan, H.M. Government understands that the trustees have received a sum equal to the interest due on the British issue. The trustees have no power to discriminate between the bonds of the different issues of this international loan. Payment to the holders of the sterling bonds is accordingly being deferred till the trustees receive the sums due from the Italian Government in respect of the other issues. This matter is being pursued vigorously with the Italian Government and I hope that an announcement may be made in about a fortnight. I deplore the delay which has taken place in these matters; I am in constant touch with the Council of Foreign Bondholders, and I have given them all the support I can with the Italian Government.

Locomotives for Nigeria

Mr. L. D. Gammans (Hornsey—C.) on November 4 asked the Secretary of State for the Colonies why 20 new locomotives for the Nigerian railways which were too heavy for most of the track had been ordered from this country; what percentage of the main-line track could not at present take them; what was the estimated cost of laying new track for them; and when the work was likely to be completed.

Mr. A. Creech Jones (Secretary of State for the Colonies) in a written answer stated: The twenty engines ordered are not too heavy for most of the track, and are being used to full capacity. Lighter engines are used on the 13 per cent. of the track where the new engines do not run. The cost of laying new track is not known in my department without further inquiry; much of the track has already been relaid in the ordinary course of overhaul, and the remainder is being dealt with steadily as materials are delivered.

Congestion in East African Ports and Railways

Colonel A. D. Dodds-Parker (Banbury —C.) on November 3 asked the Secretary of State for the Colonies what action he had taken in the past six months to clear the congestion in East African ports and railways, in particular on the Tanganyika Central line.

Mr. A. Creech Jones (Secretary of State for the Colonies) stated in a written answer: I have been in communication with the East African authorities and with the Minister of Transport on this matter. Steps have been taken to limit the volume of traffic passing through these ports to the quantities which can be handled. Committees have been set up at Mombasa and Dar-es-Salaam on which the port, railway and shipping interests are represented. These committees are responsible for reviewing the position in their ports and for any necessary recommendations for avoiding congestion or delays to shipping and goods. On the Tanganyika Central line the supply of second-hand rolling stock has enabled the railing of goods from Dar-es-Salaam to be increased. During the past six months additional covered storage has been provided at Dar-es-Salaam.

Notes and News

Publicity Officer Required.—Applications are invited for the post of publicity officer for the Docks & Inland Waterways Executive. See Official Notices on page 595.

The Docks & Inland Waterways Executive.—Applications are invited for the post of divisional waterways officer, North Eastern Division, with headquarters at Leeds. See Official Notices on page 595.

Excursion for Fishermen and Ramblers.—To cater for London fishermen and ramblers wishing to walk in the White Horse country, a half-day excursion train will run on Sunday, November 28, to Reading, Pangbourne, Didcot, Swindon, and all intermediate stations, leaving Paddington at 9.50 a.m. and arriving back at 10.5 p.m. It will call at Ealing Broadway on the forward and return journeys, at 10 a.m. and 9.55 p.m. respectively.

Institution of Civil Engineers.—A meeting of the Institution of Civil Engineers, Railway Engineering Division, Great George Street, Westminster, London, S.W.1, will be held on December 7, at 5.30 p.m. Two papers will be read at the meeting, "Renewal of Ballast and Track by Mechanical Means in Polhill Tunnel," by Mr. A. H. Cantrell, and "The Use and Maintenance of Civil Engineering Plant on Railway Work," by Mr. A. G. Ticehurst.

British Railways, Southern Region, Lecture & Debating Society.—A paper entitled "The G.W.R. System of Automatic Train Control" will be read by Mr. A. W. J. Dymond, Chief Mechanical Engineer's Department, Western Region, before the British Railways, Southern Region, Lecture & Debating Society, on November 30. The meeting will begin at 6.30 p.m. at the Social Club, East Croydon Station, and the chair will be taken by Mr. T. E. Chrimes, Superintendent of Motive Power, Southern Region.

Western Region Brains Trust.—At a meeting of British Railways, Western Region, London Lecture & Debating Society, to be held in the Clerks' Dining Club, Bishop's Bridge Road, Paddington, on December 2, at 5.45 p.m., there will be a brains trust with questions on railway operating and administration. The question master will be Mr. H. G. Bowles, Assistant to Chief Regional Officer, Western Region, and the brains trust will be composed of Mr. S. B. Taylor, Deputy Secretary, British Transport Commission, and the following Western Region officers: Mr. A. W. J. Dymond, Assistant to Chief Mechanical Engineer, Mr. S. G. Hearn, Assistant Operating Superintendent, Mr. T. H. Hollingsworth, Principal Assistant to the Commercial Superintendent, and Mr. C. H. T. Morgan, Assistant Engineer (General).

"Carry On" Music Hall at Stafford.—Continuing its series of music hall stage shows, featuring a bill of all-railway entertainers, *Carry On*, the staff news magazine of the London Midland Region of British Railways, put on its most recent production at Stafford, on November 6. This performance, which was attended by the Countess of Shrewsbury and raised funds for the Railway Servants' Orphanage and Stafford railway veterans, was the fifth of its type, previous *Carry On* music halls having been held in London (two shows), Watford, and Crewe. On the occasion of the Crewe performance (October 30), Mr. W. P. Allen, Member of the Railway Executive, was present, and during the interval spoke to the predominantly railway audience on the importance of railway clubs. The artistes of these popular shows are volunteers from all grades of the L.M.R. staff, and so popular are these shows, that *Carry On* is to present repeat performances of music hall—with new acts—at Crewe, next January, and in London next March. Chesterfield is also on the list for a visit in February, 1949.

Sunday Excursions to Cheltenham, Reading, and Westbury.—On Sunday, November 21, British Railways, Western Region, is running half-day excursions from Paddington, at 11 a.m. to Swindon, Stroud, Gloucester and Cheltenham, and at 11.18 a.m. to Reading, Newbury, Hungerford, Savernake, Lavington and Westbury; both trains will call at Ealing Broadway on the forward and return journeys. Departure times for returning to London will be Cheltenham 7.20 p.m. and Westbury 7.40 p.m., due Paddington at 10.45 p.m. and 10.5 p.m. respectively.

Inspection of Road Transport Services at Newcastle.—On November 12, Sir Cyril Hurcomb, Chairman of the British Transport Commission, made a tour of inspection of the depots and garages of various road transport undertakings in the Newcastle area which have been taken over by the Commission. He was accompanied by Major-General G. N. Russell, Chairman of the Road Transport Executive, Mr. N. C. McPherson, North Eastern Divisional Manager of the Executive, Mr. S. W. Nelson, Regional Transport Commissioner, and Mr. J. H. Brebner, Chief Public Relations & Publicity Officer, British Transport Commission.

Western Region Northolt Station Closed.—With the opening of the Central Line extension to West Ruislip on Sunday, November 21, Northolt Station, Western Region, will be closed and the railcar service between Greenford, Northolt, West Ruislip and Denham, will be withdrawn. In addition, the railcar service between Ealing and Greenford will be altered and augmented, and, to afford an easy connection at Greenford with the electric services, will operate to and from the bay platform at the Central Line station. These changes also will make necessary some alteration to the service of railcars operating between Ealing Broadway, Southall and Hayes. To provide a connection with the Central Line, the 4.30 p.m. Paddington to Banbury and the 11.26 a.m. Oxford to Paddington weekday trains, which at present do not stop at West Ruislip, will call there at 4.51 p.m. and 1.8 p.m. respectively.

G.N.R.(I.) and Wage Claims.—It was stated at a recent sitting of the Labour Court in Dublin that the Great Northern Railway (Ireland) expected to show a loss of £25,000 on its operation of all services for 1948, after providing for fixed charges and interest on debenture stock, but excluding provision for dividends on the guaranteed preference or ordinary stock. Mr. J. F. McCormick, Assistant to the General Manager, who made the statement in answer to claims for increased wages and improved working conditions for lorry drivers, helpers, carters, shop clerks and shed clerks employed in the Dublin district, said that that estimate made allowance for increases in wages recently conceded. The financial position of the company was deteriorating, and the claims before the court would cost £19,950 as to pay increases and £60,300 as to improved conditions. It was impossible, said Mr. McCormick, to meet the increasing competition from hauliers and traders, the majority of whom were paying lower wages than the company. The revenue position on the lorry services was very serious.

Railway & Canal Securities (Conversion Date) Order.—The Minister of Transport has made the Railway & Canal Securities (Conversion Date) (No. 12) Order, 1948 (Statutory Instrument No. 2329) under paragraph 1 of Part II of the Fifth Schedule to the Transport Act, 1947. Copies are obtainable (price 1d. net) from H.M. Stationery Office, or through any bookseller.

New Badge for British Railwaymen.—The design of the badge for the principal grades of British Railways staff has now been decided. It takes the general form of the standard totem enamelled in gilt lettering, and carrying the appropriate Regional colours, which are Eastern Region, blue; London Midland Region, red; North Eastern Region, tangerine; Scottish Region, pale blue; Southern Region, green; and Western Region, brown. Badges for those general grades, such as engine-

Showing the recently introduced British Railways badge

men and shunters, which have hitherto carried the initials of the individual companies, will be lettered "British Railways." Those for other staff, such as guards and ticket collectors, where the notification of the grade is considered necessary, will bear the name of the grade instead. The design of a distinctive badge for supervisory grades is still being considered. The enamelled and metal badge has been selected on grounds of economy, as it will be transferable from old to new issues of uniform.

York Locomotive Society. — Forthcoming meetings of the York Locomotive Society, which assembles at the Railway Institute, York, on Thursdays at 6.45 p.m., include papers by: Mr. John Drayton, "A Western Region Driver's Viewpoint," on December 2; Mr. R. J. Purves, "Colour Light Signalling," on February 3; Mr. C. P. Hopkins, Chief Regional Officer, North Eastern Region, "The North Eastern Region of British Railways in 1948," on March 15. The Society was formed early in 1947, to meet the wishes of locomotive enthusiasts in the various departments of the L.N.E.R. at York, and

OFFICIAL NOTICES

None of the vacancies on this page relates to a man between the ages of 18 and 50, inclusive, or a woman between the ages of 18 and 40, inclusive, unless he, or she, is excepted from the provisions of the Control of Engagement Order, 1947, or the vacancy is for employment excepted from the provisions of that Order.

WORKS MANAGER required by an old-established firm of Rolling Stock Manufacturers in South Yorkshire, making all types of high-class rolling stock, etc. It is essential that the applicant be fully experienced in the construction of all modern steel car construction, a good disciplinarian, and fully experienced in shop management. Applicants desired between the ages of 35 and 45. The appointment is superannuable. Apply in confidence, giving full particulars, to Box 207, *The Railway Gazette*, 33, Tothill Street, Westminster, S.W.1.

ENGINEERS' BENCH VICES: 4½-in. jaw, with hardened steel plates, quick release action, cast-steel construction. New and unused—delivery from stock. Special prices quoted for quantities.—Cox & Danks Limited, Steel Dept., Broadheath, Near Manchester. 'Phone: Altrincham 3711/3.

THE FIRST PASSENGER RAILWAY. By Charles E. Lee. A history of the Swansea & Mumbles Railway, which extends over 136 years. Cloth. 8¼ in. by 5½ in. 91 pp. Illustrated. 5*s*. *By post* 5*s*. 3*d*.

THE DOCKS AND INLAND WATERWAYS EXECUTIVE.—Applications are invited for the post of Publicity Officer. Applicants must have a good knowledge and experience of publicity and advertising and the preparation of brochures and other literature. The commencing salary will be from £1,250 to £1,500 per annum, according to qualifications and experience. The candidate selected for appointment will, where eligible, be expected to join a Contributory Superannuation Scheme and in this respect to comply with whatever provisions are decided upon later for the staff of the Docks and Inland Waterways Executive as a whole. Applications, accompanied by relevant particulars, should be delivered to the Secretary, The Docks and Inland Waterways Executive, 22, Dorset Square, London, N.W.1, not later than November 27, 1948.

8-TON capacity Tangye Hydraulic Lifting Jacks. Complete with handles. Height of lift 13½ in., max. extension on head 40 in., max. extension on toe 17½ in. Total weight approx. 1 cwt. Unused. Ref.: SP 7730.—Cox & Danks Limited, Plant and Machinery Dept., Broadheath, Nr. Manchester. 'Phone: Altrincham 3711.

THE WORK OF THE RAILWAY CLEARING HOUSE, 1842-1942. An account of the development and extent of the activities of this famous British railway institution. Paper. 9½ in. by 6 in. 24 pp. Illustrations. 2*s*. 6*d*. *By post* 2*s*. 8*d*.

THE DOCKS AND INLAND WATERWAYS EXECUTIVE are prepared to consider applications for the post of Divisional Waterways Officer, North Eastern Division, with Headquarters at Leeds. Candidates should have had experience in a managerial capacity in a large organisation and have knowledge of commercial and operational transport matters. The commencing salary will be from £1,750 to £2,000 a year, according to qualifications and experience. The candidates selected for appointment will, where eligible, be expected to join a Contributory Superannuation Scheme, and in this respect to comply with whatever provisions are decided upon later for the staff of the Docks and Inland Waterways Executive as a whole. Applications, accompanied by relevant particulars, should be delivered to the Secretary, The Docks and Inland Waterways Executive, 22, Dorset Square, London, N.W.1, not later than November 27, 1948.

INTERNATIONAL RAILWAY ASSOCIATIONS. Notes on the work of the various associations concerned with International traffic, principally on the European Continent. 2*s*. *By post* 2*s*. 2*d*.

RAILWAY AMALGAMATION IN GREAT BRITAIN. By W. E. Simnett. An authoritative account of the course of railway amalgamation in Great Britain up to the end of 1923. Cloth. 8¼ in. by 5¼ in. 276 pp. 15*s*. *By post* 15*s*. 7*d*.

now has a membership of 250. On November 4 Mr. T. Matthewson-Dick, District Motive Power Superintendent, York, gave his Presidential address: "Brakes and Braking"; the chairman was Mr. F. H. Petty, Motive Power Superintendent, North Eastern Region, and Mr. Spencer, Assistant Motive Power Superintendent, and Mr. A. K. Dytch, Technical Assistant to the Motive Power Superintendent, were among the members present.

North British News.—In our October 29 issue we referred in an editorial note to the new house journal published by the North British Locomotive Co. Ltd., and, as a result, requests for copies have been received by the firm. We have been asked to point out, however, that the *North British News* is issued for the benefit of employees only, and that the number of copies printed does not allow of sales outside the firm.

The Railway Benevolent Institution.—At its November meeting, the board of the Railway Benevolent Institution recorded its most sincere and grateful thanks to all who, by their kind co-operation and personal contributions, were instrumental in raising a most successful collection of £10,377 9s. 10d. on the occasion of the Flag Day held on September 10. At the same meeting, the board granted annuities to five widows and five members, amounting to £162 18s. per annum, and authorised 19 grants, amounting to £188 17s., from the special benevolent fund in cases of immediate necessity. Grants made from the casualty fund during October amounted to £370 6s. 6d.

Institute of Travel Agents Conference.—The annual conference of the Institute of Travel Agents was held at Southport on October 15 and 16. Several members suggested that new branches should be formed in various parts of the country and a delegate from Northern Ireland said he hoped that some effort would be made to secure the issue of circular rail tickets from Northern Ireland. During the meeting, addresses were given by Mr. S. Townend, British Travel Association, and M. Vignon, French National Tourist Office. Mr. Townend dealt with the problem of staggered holidays and referred to a decision by the Ministry of Education to hold school examinations earlier in the year as from 1950. Guests at the annual dinner included Mr. H. O. Ernst, Swiss Federal Railways; Mr. A. L. Rawlinson, European Passenger Manager, Canadian Pacific Railway; Mr. H. J. A. Hill, British European Airways, and Mr. Alan Bennett, B.O.A.C.

Great Western Railway (London) Dramatic Society.—On Monday and Tuesday evenings last the Great Western Railway (London) Dramatic Society gave performances at the Fortune Theatre, Drury Lane, of the play "Rebecca," by Daphne Du Maurier. The Society was founded in 1922, and, except for the war years, has presented plays continuously. A number of productions has been staged in aid of charities, notable among these being the Helping Hand Fund, the Railway Convalescent Homes, Star & Garter Home, and the St. David's Home, Ealing. The President, Chairman, and Deputy Chairman are respectively Sir James Milne, Mr. K. W. C. Grand, and Mr. H. H. Phillips. Mr. Alexander Griffiths gave an outstanding performance as Colonel Julyan, and Miss Phyllis Griffiths as Mrs. Danvers.

Courses for Railway Goods Staff.—A scheme has been introduced in the Scottish Region of British Railways, for training staff employed on the handling of merchandise at railway goods stations, under which goods checkers, loaders and porters released from their normal duties, spend a week attending a series of lectures and practical demonstrations at Sighthill Goods Station, Glasgow. The courses are designed to include all aspects of the men's daily work and cover: acceptance and checking of traffic; method of loading into wagon, or van; railway geography and transhipment arrangements; unloading of traffic from rail vehicle and loading to lorry for delivery to customer; use of special tackle and equipment; the safe transit of traffic and prevention of claims. The number of men attending each course is limited to twenty and lectures are kept short, with the maximum time devoted to demonstrations, practical work and discussion under the supervision of expert instructors. Exchange of ideas is encouraged so that the best features of extensive experience can be adopted for general application. It is hoped to arrange similar courses at other centres throughout Scotland, and special short courses, embracing the principal features of the full course, also, are being arranged for foremen and supervisors.

Buenos Ayres & Pacific Railway Co. Ltd.—A circular issued by the joint liquidators of the Buenos Ayres & Pacific Railway Co. Ltd. (in voluntary liquidation), addressed to holders of the 5 per cent. preference stock, 5 per cent. second preference stock, 6 per cent. preference stock, and ordinary stock, states that, in accordance with the provisions of the General Scheme of Arrangement, dated May 30, 1947, between the British-owned Argentine railway companies and their classes of creditors and members mentioned in the scheme, and which scheme was duly sanctioned by Order of the Court, dated August 21, 1947, the Buenos Ayres & Pacific Fund, as defined in Part VII of the scheme, has been applied in redeeming, or making full provision for the redemption of, the loan capital of the company on the terms therein contained. Out of the balance of the Buenos Ayres & Pacific Fund a first liquidation distribution will be paid on November 30 to the stockholders as follows:—

Stock	Liquidation payment
5 per cent. first preference ..	£35 per cent.
5 per cent. second preference	£25 per cent.
6 per cent. preference ..	£25 per cent.
Ordinary	£12½ per cent.

Goods Carriers' Licences.—To save paper and labour the Minister of Transport has made Regulations simplifying applications for, and the issue of, carriers' licences for goods vehicles under the Road & Rail Traffic Act, 1933. These changes, decided after consultation with representative organisations of the road transport industry, come into operation on January 1 next. The Regulations provide for new forms of application for "A," "A Contract," "B," and "C" carriers' licences, and for new procedure, which, it is stated, will eventually result in a saving of about 14 separate types of licence form. The present fee of 10s. per licence for the variation of the conditions of a "B" licence will be reduced after January 1 to 2s. per vehicle. The Minister has also decided to issue a new type of identity certificate for vehicles operating under "A," "A Contract," and "B" licences, which will show the operating centre of the vehicle under section 58 of the Transport Act, 1947. Copies of the Regulations,

entitled the Goods Vehicles (Licences & Prohibitions) (Amendment) Regulations, 1948, may be obtained from H.M. Stationery Office, or through any bookseller, price 3d. each (post free, 4d.).

Train Indicators for East London Line Stations.—Platform train-indicators to show the destination of southbound trains, are to be installed by London Transport at the following East London Line stations: Whitechapel, Shadwell, Wapping, Rotherhithe, and Surrey Docks.

Presentations to Motor Drivers and Carters.—On Friday, November 12, at High Street Goods Station, and at the Parcels Office, Queen Street Station, Glasgow, presentations to motor drivers and carters, who won awards of medals, bars and diplomas in the Scottish Region safe-driving competition for 1946 and 1947, were made by Mr. W. Yeaman, Commercial Superintendent, Scottish Region. Eighty-five men at High Street Goods Station qualified for awards and 15 men at Queen Street Parcels Office. A number of gold medals was presented, the award of a gold medal indicating 10 years accident-free driving.

Forthcoming Meetings

November 19 (*Fri.*).—Institution of Mechanical Engineers, Storey's Gate, St. James's Park, London, S.W.1, at 6 p.m. "Heat Engines," by Mr. K. Baumann.

November 19 (*Fri.*).—Society of Engineers, 17, Victoria Street, London, S.W.1, at 6.30 p.m. "Three-Dimensional Projection as Applied to Engineering Drawing," by Mr. W. E. Walters.

November 22 (*Mon.*).—Institution of Electrical Engineers, Savoy Place, London, W.C.2, at 5.30 p.m. Discussion on "Single-Phase to Three-Phase Conversion Systems," opened by Mr. A. N. D. Kerr.

November 23 (*Tues.*).—Institute of Transport, Metropolitan Graduate & Student Society, at 80, Portland Place, London, W.1, at 5.30 for 6 p.m. Annual General Meeting followed by: "Transport Staff Welfare," by Mr. J. Skegg.

November 23 (*Tues.*).—Institute of Transport, Leeds Graduate & Student Society, at the City Transport Offices, at 7 p.m. "Principles of Railway Signalling," by Mr. A. H. Bostock.

November 24 (*Weds.*).—Railway Students' Association, London School of Economics & Political Science; visit to Post Office (London) Railway at Mount Pleasant, at 6 p.m.

November 24 (*Weds.*).—Engineers' Guild, at the Old Medical Theatre, Birmingham University, Edmund Street, Birmingham, at 6 p.m. "The Guild as an Association of Professional Engineers," by Mr. Robert Chalmers and Mr. J. H. W. Turner.

November 25 (*Thurs.*).—Institute of Welding joint meeting with Institution of Structural Engineers, at 11, Upper Belgrave Street, London, S.W.1, at 5.55 p.m. "Curved Bridges—Why they Should be Welded," by Dr. H. Gottfeldt.

November 26 (*Fri.*).—Institution of Railway Signal Engineers, at the London Transport Executive Signal School, Earls Court Station, S.W.5, at 6.15 p.m. "Single Line Control," by Mr. D. C. Doswill.

Railway Stock Market

Political news helped stock markets, and price movements were in favour of holders, accompanied by reports of an increased volume of money seeking investment. The success of the new Trinidad Loan (the premium on which has been as high as 35s.) and expectations of particulars of another gilt-edged loan before the end of the week, developed fresh strength in British Funds. Big gains were established in 2½ per cent. Consols and Treasury Bonds, and 3 per cent. Transports at 101 and the new Electricity loan at a premium of 22s. 6d. reached new high levels. There was increased activity in 3 per cent. Transport ("Wagon") stock at 102⅜, also a new high level.

Road transport shares suffered a heavy setback on conflicting rumours regarding the position of minority shareholders in the various operating companies control of which is held by British Transport by acquisition of the large Tillings holdings. Reports have been current that British Transport may not acquire the remaining shares held by minority shareholders, and that it may be some while before an offer is made. Because of the great uncertainty, jobbers marked down prices, including shares of companies in the B.E.T. group, such as East Kent, which dropped 5s. to 126s. 3d., and Southdown which slumped 10s. to 156s. 3d. It is felt that, in view of all the circumstances, an official statement should be made by British Transport on the position of minority shareholdings in the road transport concerns which it now controls. Tillings have been a steady market around 119s. 6d. and the opinion is growing that, taking a long view and as there is to be a capital return of £5 per £1 share, the current price of the shares should be nearer 130s. than 120s. There have been sharp fluctuations again in B.E.T. deferred stock, which after a big rally last week, has come back to £1,960.

Foreign railway stocks were less prominent, but there was again activity in Leopoldina issues, due to speculative buying on possible take-over developments arising from the forthcoming visit of Senor Machado to discuss the Anglo-Brazil agreement. Earlier gains have not been fully held, Leopoldina ordinary easing to 12½, the preference stock to 37½, while the 4 per cent. debentures were 75½, and Leopoldina Terminal 5 per cent. debentures also eased to 71½. Great Western of Brazil came back to 106s. 3d. and, elsewhere, United of Havana 1906 debentures moved slightly lower to 15½. Antofagasta ordinary was 9¾ and the preference stock 58½. San Paulo has been steady at 170. Mexican Railway 6 per cent. debentures were 84½. Manila "A" debentures changed hands around 85 and the preference shares around 9s. 6d. Midland Uruguay debentures eased to 44½. There was some attention given to La Guaira stock which showed a number of dealings around 26½, and Buenos Ayres Central 4½ per cent. debentures were active up to 45. Beira Railway bearer shares were 62s. 6d. Canadian Pacifics attracted speculative attention on renewed talk of oil discoveries on the company's properties, and changed hands at the higher level of 22, with the preference stock better at 79½.

The iron and steel debate has had no appreciable influence on steel shares, which remained firm around the "take-over" levels. Yield considerations have drawn attention to William Beardmore, which have risen to 54s. 6d., compared with the take-over valuation of 53s. 8d. There has been a little selling of Stewarts and Lloyds which give only a moderate yield and, at 56s. 3d., the market price is more than 1s. below the take-over level. Locomotive building and engineering shares have been very firm, with Beyer Peacock at 25s., Vulcan Foundry 27s. 9d., and North British Locomotive 24s. 9d. Gloucester Railway Carriage were 63s. 6d., Charles Roberts £7¾, Wagon Repairs 5s. shares 21s. 3d. and elsewhere T. W. Ward at 64s. 6d. were helped by the strength displayed by the consolidated accounts.

Traffic Table of Overseas and Foreign Railways

	Railways	Miles open	Week ended	Traffics for week: Total this year	Traffics for week: inc. or dec. compared with 1946/47	No. of weeks	Aggregate traffics to date: Total 1947/8	Aggregate traffics to date: Increase or decrease
South & Central America	Antofagasta... ...	811	7.11.48	£ 53,000	– £ 2,472	44	£ 2,449,180	+ £ 508,760
	Bolivar	174	July, 1948	$28,960	– $69,357	30	$471,287	– $301,893
	Brazil	—	—	—	—	—	—	—
	Cent. Uruguay ...	970	6.11.48	32,712	+ 2,978	18	595,105	– 7,652
	Costa Rica	281	Sept., 1948	34,083	+ 4,533	13	111,619	+ 18,546
	Dorada	70	Sept., 1948	30,656	+ 456	39	240,485	– 33,615
	G.W. of Brazil ...	1,040	6.11.48	39,100	– 2,600	44	1,439,200	– 26,300
	Inter. Ctl. Amer. ...	794	Sept., 1948	$945,329	+ $46,210	39	$10,114,948	+ $203,761
	La Guaira	22¾	Oct., 1948	$109,661	+ $21,862	43	$1,048,517	– $27,377
	Leopoldina	1,920	6.11.48	62,646	+ 3,167	44	2,489,441	– 480,407
	Midland Uruguay ...	319	Sept., 1948	19,608	+ 3,123	12	67,355	+ 16,721
	Nitrate	382	31.10.48	13,402	+ 6,874	43	258,996	+ 73,826
	N.W. of Uruguay ...	113	Sept., 1948	5,686	– 1,213	12	16,335	+ 1,989
	Paraguay Cent. ...	274	5.11.48	G$92,602	+ G$20,782	18	G$1,816,927	+ G$729,084
	Peru Corp. ...	1,059	Oct., 1948	205,602	+ 27,225	17	753,073	+ 56,933
	Salvador	100	Aug, 1948	c$80,000	– c$2,000	9	c$165,000	+ c$8,000
	San Paulo	153½	—	—	—	—	—	—
	Taltal	156	Oct., 1948	7,970	+ 115	17	31,730	+ 7,460
	United of Havana ...	1,301	6.11.48	44,831	– 8,126	18	793,547	– 334,671
	Uruguay Northern	73	Sept., 1948	1,072	+ 52	12	3,308	+ 111
Canada	Canadian National...	23,473	Aug., 1948	10,110,000	+ 855,250	35	77,676,250	+ 5,854,000
	Canadian Pacific ...	17,037	Sept., 1948	8,499,750	+ 1,556,500	39	63,896,750	+ 5,664,750
Various	Barsi Light† ...	202	Oct., 1948	26,610	+ 12,187	31	181,702	+ 7,717
	Beira	204	Aug., 1948	115,987	+ 2,924	47	1,287,270	+ 246,785
	Egyptian Delta ...	607	30.10.48	19,211	+ 1,455	26	328,731	+ 31,899
	Gold Coast ...	536	Sept., 1948	165,446	+ 21,792	26	1,185,462	+ 258,231
	Manila	—	—	—	—	—	—	—
	Mid. of W. Australia	277	Sept., 1948	29,589	+ 5,512	12	82,246	+ 16,684
	Nigeria	1,900	Aug., 1948	403,545	+ 97,720	21	2,205,705	+ 483,370
	Rhodesia	2,445	Sept., 1947	643,980	+ 102,833	52	6,787,603	+ 612,938
	South Africa ...	13,347	16.10.48	1,338,175	+ 69,055	29	37,800,609	+ 2,194,258
	Victoria	4,774	June, 1948	1,358,791	+ 248,144	52	—	—

† Receipts are calculated @ 1s. 6d. to the rupee